

Table S1: Full RIP-ChIP dataset. PB ID: *P. berghei* gene names; Product Description: *P. berghei* product description; FC DOZI/WT: fold change expression from the DOZI-KO vs. wild type [Mair et al., 2006]; Confidence: corresponds to the false discovery rate (expected percent of false predictions in the set of predictions (see www.plasmodb.org); PF ID: *P. falciparum* gene names; PF Product Description: *P. falciparum* product description; Manual Annotation: obtained from literature scan, BLASTs etc; CITH: CITH immunoprecipitation, 0, not enriched, 1, enriched; DOZI: DOZI immunoprecipitation, 0, not enriched, 1, enriched; DOZI/CITH: 0, not enriched, 1, enriched in one IP, 2, enriched in both IPs; Gene Deletion Phenotype (RMgMDB, www.pberghei.eu); PB and PF annotated Gene Ontology (GO) Molecular Function, Biological Process and Cellular Component.

PBANKA	Product Description	FC		PF ID	PF Product Description	Manual Annotation	Gene Deletion Phenotype			<i>P. berghei</i> annotated GO			syntenic <i>P. falciparum</i> orthologs annotated GO			
		DOZI/WT	Confidence				CITH	DOZI	DOZI/CITH	in mosquito and liver stages	Molecular Function	Biological Process	Cellular Component	Molecular Function	Biological Process	Cellular Component
PBANKA_134780	20 kDa chaperonin, putative (CPN20)	-2.73	0.75	PF3D7_1333000	20 kDa chaperonin (CPN20)	chaperone	1	1	2	na	ATP binding, chaperone binding	protein folding	apicoplast			
PBANKA_071420	ClpB protein, putative (ClpB1)	-1.63	0.7	PF3D7_0816600	ClpB protein, putative (ClpB1)	chaperone	1	1	2	na	ATP binding, nucleoside-triphosphatase activity, protein binding	protein metabolic process	apicoplast			
PBANKA_051500	25 kDa ookinete surface antigen precursor (P25)	-5.59	0.75	PF3D7_1031000	25 kDa ookinete surface antigen precursor (Pfs25)	adhesin	1	1	2	different in fertilization, ookinete and oocyst	null	null	cell surface, membrane			
PBANKA_051490	28 kDa ookinete surface protein (P28)	-2.62	0.75	PF3D7_1030900	28 kDa ookinete surface protein (Pfs28)	adhesin	1	1	2	different in fertilization, ookinete and oocyst	null	null	cell surface, membrane			
PBANKA_051170	topoisomerase, putative			PF3D7_1027600	topoisomerase, putative	DNA replication	1	1	2	na	ATP binding, DNA binding, catalytic activity	DNA metabolic process	chromosome			
PBANKA_081680	glycolipid transfer protein, putative	-5.27	0.75	PF3D7_0915800	glycolipid transfer protein, putative	lipid metabolism	1	1	2	na	glycolipid binding, glycolipid transporter activity	glycolipid transport	cytoplasm			
PBANKA_102870	conserved Plasmodium protein, unknown function			PF3D7_1414000	conserved protein, unknown function	unknown function	1	1	2	na	null	null	cytoplasm, nucleus			
PBANKA_071290	high mobility group protein, putative (HMGB2)	-3.31	0.71	PF3D7_0817900	high mobility group protein (HMGB2)	chromatin	1	1	2	na	DNA binding	null	cytoplasm, nucleus			
PBANKA_092000	multi-protein bridging factor type 1, putative			PF3D7_1128200	multi-protein bridging factor type 1, putative	transcription	1	1	2	na	sequence-specific DNA binding	null	cytosol, nuclear periphery			
PBANKA_103840	selenoprotein, putative (Sel1)			PF3D7_1403600	selenoprotein (Sel1)	redoxmeth	1	1	2	na	null	null	endoplasmic reticulum			
PBANKA_060930	GPI mannosyltransferase I, putative			PF3D7_1210900	GPI mannosyltransferase I (PIG-M)	GPI	1	1	2	na	transferase activity, transferring hexosyl groups	GPI anchor biosynthetic process	endoplasmic reticulum membrane, integral to membrane			
PBANKA_083680	Pb-fam-1 protein			PF3D7_1147800.1/2	merozoite adhesive erythrocytic binding protein (MAEBL)	contaminant	1	1	2	na	null	null	host cell membrane			
PBANKA_133890	glideosome associated protein with multiple membrane spans 1, putative	-4.14	0.75	PF3D7_1323700	glideosome associated protein with multiple membrane spans 1 (GAPM1)	gliding motility	1	1	2	KO not successful	null	null	inner membrane complex			
PBANKA_090710	inner membrane complex protein 1b (IMC1b)	-3.1	0.73	PF3D7_1141900	inner membrane complex protein 1b, putative (IMC1b)	gliding motility	1	1	2	different in fertilization, ookinete and oocyst	null	null	inner membrane complex			
PBANKA_124060	inner membrane complex protein 1g, putative (IMC1G)	-4.13	0.75	PF3D7_0525800	membrane skeletal protein IMC1-related	gliding motility	1	1	2	na	null	null	inner membrane complex			
PBANKA_143660	inner membrane complex protein 1h (IMC1h)	-2.99	0.73	PF3D7_1221400	membrane skeletal protein, putative (ALV3)	gliding motility	1	1	2	different in fertilization, ookinete, oocyst, sporozoite and liver stage	null	null	inner membrane complex			
PBANKA_130290	copper transporter, putative			PF3D7_1439000	copper transporter putative	transporter	1	1	2	na	copper ion transmembrane transporter activity	copper ion transport	integral to membrane			
PBANKA_123130	metabolite/drug transporter, putative	-3.99	0.75	PF3D7_0516500	metabolite/drug transporter, putative	transporter	1	1	2	not different from wild type	tetracycline:hydrogen antiporter activity	response to antibiotic, tetracycline transport	integral to membrane			
PBANKA_123780	multidrug resistance protein, putative (MDR1)	-2.4	0.7	PF3D7_0523000	multidrug resistance protein (MDR1)	transporter	1	1	2	na	ATP binding, ATPase activity, coupled to transmembrane movement of substances	transport	integral to membrane			

PBANKA_082140	ADP-ribosylation factor-like protein	-4.56	0.75	PF3D7_0920500	ADP-ribosylation factor, putative	trafficking	1	1	2	na	GTP binding	small GTPase mediated signal transduction	intracellular
PBANKA_051850	ADP-ribosylation factor, putative	-4.45	0.75	PF3D7_1034700	ADP-ribosylation factor, putative	trafficking	1	1	2	na	GTP binding	intracellular protein transport, small GTPase mediated signal transduction	intracellular
PBANKA_100830	conserved Plasmodium protein, unknown function			PF3D7_1436300	translocon component PTEX150 (PTEX150)	trafficking	1	1	2	na	GTP binding	null	intracellular
PBANKA_142370	GDP-mannose 4,6-dehydratase, putative	-2.74	0.75	PF3D7_0813800	GDP-mannose 4,6-dehydratase, putative	mannose metabolism	1	1	2	na	GDP-mannose 4,6-dehydratase activity, coenzyme binding	GDP-mannose metabolic process	intracellular
PBANKA_122330	GTPase, Rab18, putative			PF3D7_0807300	Rab GTPase 18 (RAB18)	trafficking	1	1	2	na	GTP binding, GTPase activity, protein binding	intracellular protein transport, nucleocytoplasmic transport, small GTPase mediated signal transduction	intracellular
PBANKA_141890	Rab GTPase 11a (Rab11a)	-4.21	0.75	PF3D7_1320600	Rab GTPase 11a (RAB11a)	trafficking	1	1	2	KO not successful	GTP binding, GTPase activity, protein binding	intracellular protein transport, nucleocytoplasmic transport, small GTPase mediated signal transduction	intracellular
PBANKA_030800	Rab5a, GTPase, putative			PF3D7_0211200	Rab GTPase 5a (RAB5a)	trafficking	1	1	2	na	GTP binding, GTPase activity, protein binding	intracellular protein transport, nucleocytoplasmic transport, small GTPase mediated signal transduction	intracellular
PBANKA_041820	Rab7, putative			PF3D7_0903200	Rab GTPase 7 (Rab7)	trafficking	1	1	2	na	GTP binding, GTPase activity, protein binding	intracellular protein transport, nucleocytoplasmic transport, small GTPase mediated signal transduction	intracellular
PBANKA_114350	ribosome biogenesis protein MRT4, putative			PF3D7_1367600	ribosome biogenesis protein MRT4, putative	ribosome assembly	1	1	2	na	null	ribosome biogenesis	intracellular
PBANKA_144580	small GTPase Rab2, putative			PF3D7_1231100	Rab GTPase 2 (RAB2)	trafficking	1	1	2	na	GTP binding, GTPase activity, protein binding	intracellular protein transport, nucleocytoplasmic transport, small GTPase mediated signal transduction	intracellular
PBANKA_071400	meiotic recombination protein DMC1-like protein, putative			PF3D7_0816800	meiotic recombination protein dmc1-like protein	DNA repair	1	1	2	different in fertilization, ookinete, oocyst, sporozoite and liver stage	ATP binding, DNA binding, DNA-dependent ATPase activity, protein binding	reciprocal meiotic recombination	intracellular, nucleus
PBANKA_070910	60S ribosomal protein L22, putative			PF3D7_0821700	60S ribosomal protein L22, putative	ribosome	1	1	2	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_134670	60S ribosomal protein L23, putative			PF3D7_1331800	60S ribosomal protein L23, putative	ribosome	1	1	2	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_090490	conserved Plasmodium protein, unknown function			PF3D7_1144100	conserved protein, unknown function	unknown function	1	1	2	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_124560	mitochondrial ribosomal protein S16 precursor, putative			PF3D7_0531200	mitochondrial ribosomal protein S16 precursor, putative	ribosome mito	1	1	2	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_061600	mitochondrial ribosomal protein S8 precursor, putative			PF3D7_0718400	mitochondrial ribosomal protein S8 precursor, putative	ribosome mito	1	1	2	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_101810	ABC transporter, putative			PF3D7_1426500	ABC transporter, (EPP family), putative	transporter	1	1	2	na	ATP binding, ATPase activity	null	membrane
PBANKA_070670	dicarboxylate/tricarboxylate carrier, putative (DTC)	-5.45	0.75	PF3D7_0823900	dicarboxylate/tricarboxylate carrier (DTC)	transporter	1	1	2	na	binding	transport	membrane
PBANKA_010210	dihydroorotate dehydrogenase, putative (DHODH)	-2.58	0.75	PF3D7_0603300	dihydroorotate dehydrogenase, mitochondrial precursor (DHODH)	pyrimidine metabolism	1	1	2	na	dihydroorotate dehydrogenase activity, dihydroorotate oxidase activity	'de novo' pyrimidine nucleobase biosynthetic process, UMP biosynthetic process	membrane
PBANKA_135900	sec61 alpha subunit, putative			PF3D7_1346100	Sec61 alpha subunit, PfSec61 (SEC61)	trafficking	1	1	2	na	P-P-bond-hydrolysis-driven protein transmembrane transporter activity	protein transport	membrane
PBANKA_030690	Sec61-gamma subunit of protein translocation complex, putative	-3.5	0.75	PF3D7_0210000	secretory complex protein 61 gamma subunit (Sec61-gamma)	trafficking	1	1	2	na	P-P-bond-hydrolysis-driven protein transmembrane transporter activity	protein targeting	membrane
PBANKA_052350	clathrin assembly protein, putative			PF3D7_0423100	clathrin assembly protein, putative	trafficking	1	1	2	na	protein binding, protein transporter activity	intracellular protein transport, vesicle-mediated transport	membrane coat
PBANKA_143230	cell traversal protein for ookinetes and sporozoites (CelTOS)			PF3D7_1216600	cell traversal protein for ookinetes and sporozoites (CelTOS)	adhesin	1	1	2	different in fertilization, ookinete, oocyst, sporozoite and liver stage	null	null	microneme
PBANKA_060710	tim10 homologue, putative			PF3D7_1208600	tim10 homologue, putative	trafficking	1	1	2	na	null	protein import into mitochondrial inner membrane	mitochondrial intermembrane space protein transporter complex
PBANKA_110260	zinc binding protein, putative			PF3D7_0502900	mitochondrial inner membrane TIM10 associated protein, putative	trafficking	1	1	2	na	null	protein import into mitochondrial inner membrane	mitochondrial intermembrane space protein transporter complex
PBANKA_082880	cytochrome c oxidase, putative			PF3D7_0928000.1/2	cytochrome c oxidase, putative	redoxmeth	1	1	2	na	cytochrome-c oxidase activity	null	mitochondrion
PBANKA_135570	myosin A (MyoA)	-4.46	0.75	PF3D7_1342600	myosin A (MyoA)	gliding motility	1	1	2	(mutated) different in fertilization, ookinete, oocyst and sporozoite	ATP binding, motor activity	null	myosin complex
PBANKA_144940	Splicing factor 3B subunit 3, putative (SF3B3)			PF3D7_1234800	Splicing factor 3B subunit 3, putative (SF3B3)	mRNA	1	1	2	na	nucleic acid binding	null	nucleus
PBANKA_090590	transcription factor with AP2 domain(s) (AP2-O)	-3.76	0.75	PF3D7_1143100	transcription factor with AP2 domain(s) (AP2-O)	transcription	1	1	2	different in fertilization, ookinete, oocyst and sporozoite	sequence-specific DNA binding transcription factor activity	regulation of transcription, DNA-dependent	nucleus
PBANKA_092880	U2 snRNP auxiliary factor, small subunit, putative			PF3D7_1119300	U2 snRNP auxiliary factor, small subunit, putative	mRNA	1	1	2	na	RNA binding, zinc ion binding	null	nucleus
PBANKA_130820	1-acyl-sn-glycerol-3-phosphate acyltransferase, putative (LPAAT)			PF3D7_1444300	apicoplast 1-acyl-sn-glycerol-3-phosphate acyltransferase, putative	fatty acids synth	1	1	2	KO not successful	transferase activity, transferring acyl groups	metabolic process	null

PBANKA_051300	conserved Plasmodium protein, unknown function			PF3D7_1028900	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	membrane
PBANKA_052110	conserved Plasmodium protein, unknown function			PF3D7_1038200	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_060330	conserved Plasmodium protein, unknown function			PF3D7_1204400	conserved Plasmodium membrane protein, unknown function	unknown function	1	1	2	na	null	null	na	na	na
PBANKA_061240	conserved Plasmodium protein, unknown function	-4.07	0.75	PF3D7_0411000	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	apicoplast, integral to membrane, membrane
PBANKA_061780	conserved Plasmodium protein, unknown function	-2.09	0.75	PF3D7_0720300	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_062030	conserved Plasmodium protein, unknown function	-4.34	0.75	PF3D7_0722800	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_062040	conserved Plasmodium protein, unknown function	-3.41	0.75	PF3D7_0722900	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_070330	conserved Plasmodium protein, unknown function	-3.25	0.75	PF3D7_0827400	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	cytoplasm
PBANKA_070490	conserved Plasmodium protein, unknown function			PF3D7_0825700	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_071220	conserved Plasmodium protein, unknown function	-2.64	0.75	PF3D7_0818600	conserved Plasmodium protein, unknown function	unknown function	1	1	2	different in oocyst, sporozoite and liver stage	null	null	hydrolase activity	null	membrane
PBANKA_072090	conserved Plasmodium protein, unknown function	-4.34	0.75	PF3D7_0418800	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	cytoplasm, membrane
PBANKA_080290	conserved Plasmodium protein, unknown function			PF3D7_0705200	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_080380	conserved Plasmodium protein, unknown function			PF3D7_0706200	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_081330	conserved Plasmodium protein, unknown function	-3.35	0.75	PF3D7_0912200	conserved Plasmodium membrane protein, unknown function	unknown function	1	1	2	na	null	null	null	null	integral to membrane, membrane
PBANKA_081540	conserved Plasmodium protein, unknown function	-5.12	0.75	PF3D7_0914400	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	nucleotide binding	null	cytoplasm
PBANKA_082120	conserved Plasmodium protein, unknown function			PF3D7_0920300	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	cytoplasm
PBANKA_082320	conserved Plasmodium protein, unknown function	-3.1	0.73	PF3D7_0922300	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_082590	conserved Plasmodium protein, unknown function			PF3D7_0925100	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	integral to membrane, membrane
PBANKA_082740	conserved Plasmodium protein, unknown function	-4.21	0.75	PF3D7_0926600	conserved Plasmodium membrane protein, unknown function	unknown function	1	1	2	na	null	null	null	null	integral to membrane, membrane
PBANKA_083280	conserved Plasmodium protein, unknown function			PF3D7_0932000	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	integral to membrane, membrane
PBANKA_083470	conserved Plasmodium protein, unknown function			PF3D7_0933900	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	DNA integration, DNA recombination, proteolysis, transposition	cytoplasm, nucleus	
PBANKA_090170	conserved Plasmodium protein, unknown function			PF3D7_1147400	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	protein farnesyltransferase activity, zinc ion binding	protein farnesylation	protein farnesyltransferase complex
PBANKA_090300	conserved Plasmodium protein, unknown function			PF3D7_1146100	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	membrane
PBANKA_090620	conserved Plasmodium protein, unknown function			PF3D7_1142800	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_090780	conserved Plasmodium protein, unknown function	-1.93	0.73	PF3D7_1141200	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	transferase activity	null	cytoplasm, membrane
PBANKA_091320	conserved Plasmodium protein, unknown function			PF3D7_1135300	conserved Plasmodium membrane protein, unknown function	unknown function	1	1	2	na	null	null	null	null	integral to membrane
PBANKA_091670	conserved Plasmodium protein, unknown function	-3.42	0.75	PF3D7_1131500	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	ATP binding, hydrolase activity	null	cytoplasm
PBANKA_093260	conserved Plasmodium protein, unknown function			PF3D7_1115100	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_100170	conserved Plasmodium protein, unknown function			PF3D7_0404200	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_100190	conserved Plasmodium protein, unknown function					unknown function	1	1	2	na	null	null	null	null	membrane
PBANKA_102680	conserved Plasmodium protein, unknown function			PF3D7_1415900	conserved Plasmodium protein, unknown function	nucleic acid binding	1	1	2	na	null	null	zinc ion binding	null	nucleus

PBANKA_103300	conserved Plasmodium protein, unknown function			PF3D7_1409400	conserved Plasmodium membrane protein, unknown function	unknown function	1	1	2	na	null	null	null	na	na	na
PBANKA_103880	conserved Plasmodium protein, unknown function			PF3D7_1403200	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		extracellular region, membrane
PBANKA_110410	conserved Plasmodium protein, unknown function	-8.06	0.75	PF3D7_0504500	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	attachment of GPI anchor to protein	cytoplasm
PBANKA_110600	conserved Plasmodium protein, unknown function			PF3D7_0506400	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_110930	conserved Plasmodium protein, unknown function	-3.59	0.75	PF3D7_0509700	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		apicoplast
PBANKA_110990	conserved Plasmodium protein, unknown function	-2.15	0.73	PF3D7_0510300	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		cytoplasm
PBANKA_111020	conserved Plasmodium protein, unknown function	-4.6	0.75	PF3D7_0510700	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_111270	conserved Plasmodium protein, unknown function			PF3D7_0513000	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_111500	conserved Plasmodium protein, unknown function	-3.83	0.75	PF3D7_0515400	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_112590	conserved Plasmodium protein, unknown function	-2.28	0.75			unknown function	1	1	2	na	null	null	null	na	na	na
PBANKA_113230	conserved Plasmodium protein, unknown function			PF3D7_1356000	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	ATP binding, hydrolase activity		null
PBANKA_113580	conserved Plasmodium protein, unknown function			PF3D7_1359500	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_113740	conserved Plasmodium protein, unknown function			PF3D7_1361300	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		membrane
PBANKA_113860	conserved Plasmodium protein, unknown function	-4.57	0.73	PF3D7_1362600	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_114380	conserved Plasmodium protein, unknown function	-4.19	0.75	PF3D7_1367900	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		apicoplast, membrane
PBANKA_120450	conserved Plasmodium protein, unknown function			PF3D7_1006300	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_120930	conserved Plasmodium protein, unknown function			PF3D7_1010900	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	ATP binding, protein kinase activity	protein phosphorylation	Golgi apparatus, cytoplasm, cytoplasmic vesicle, membrane
PBANKA_121440	conserved Plasmodium protein, unknown function	-3.47	0.75	PF3D7_1016000	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	ATP binding, protein binding		cytoplasm, plasma membrane
PBANKA_122530	conserved Plasmodium protein, unknown function	-2.93	0.72	PF3D7_0805300	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	N-acetylgalactosaminyl-proteoglycan 3-beta-glucuronosyltransferase activity, zinc ion binding	null	intracellular, plasma membrane
PBANKA_122550	conserved Plasmodium protein, unknown function	-2.7	0.73	PF3D7_0805100	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_122750	conserved Plasmodium protein, unknown function			PF3D7_0802700	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_122990	conserved Plasmodium protein, unknown function	-2.38	0.72	PF3D7_0615200	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_123900	conserved Plasmodium protein, unknown function			PF3D7_0524200	conserved Plasmodium membrane protein, unknown function	unknown function	1	1	2	na	null	null	null	null		integral to membrane, membrane
PBANKA_124010	conserved Plasmodium protein, unknown function	-3.8	0.75	PF3D7_0525300	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_124240	conserved Plasmodium protein, unknown function			PF3D7_0527600	conserved Plasmodium protein, unknown function	DNA replication	1	1	2	na	null	null	null	null		null
PBANKA_124260	conserved Plasmodium protein, unknown function			PF3D7_0528000	conserved Plasmodium protein, unknown function	proteasome	1	1	2	na	null	null	null	null		cytoplasm
PBANKA_124520	conserved Plasmodium protein, unknown function	-2.94	0.73	PF3D7_0530800	CPW-WPC family protein	adhesin	1	1	2	na	null	null	null	null		null
PBANKA_130980	conserved Plasmodium protein, unknown function			PF3D7_1446100	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		cytoplasm
PBANKA_131130	conserved Plasmodium protein, unknown function	-2.11	0.75	PF3D7_1447500	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		cytoplasm
PBANKA_131140	conserved Plasmodium protein, unknown function			PF3D7_1447600	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null		null
PBANKA_131260	conserved Plasmodium protein, unknown function			PF3D7_1448900	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	DNA binding, metal ion binding	regulation of transcription, DNA-dependent, transcription, DNA-dependent	nucleus

PBANKA_143070	conserved Plasmodium protein, unknown function		PF3D7_1214900	conserved Plasmodium membrane protein, unknown function	unknown function	1	1	2	na	null	null	null	L-malate dehydrogenase activity, binding	glycolysis, malate metabolic process, tricarboxylic acid cycle	integral to membrane
PBANKA_143500	conserved Plasmodium protein, unknown function		PF3D7_1219800	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null	integral to membrane, plasma membrane
PBANKA_143630	conserved Plasmodium protein, unknown function	-2.46	0.73	PF3D7_1221100	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_143640	conserved Plasmodium protein, unknown function			PF3D7_1221200	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	ATP binding, ATPase activity, coupled to transmembrane movement of substances, chloride channel activity, chloride ion binding	transport	integral to membrane
PBANKA_143770	conserved Plasmodium protein, unknown function			PF3D7_1222800	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	cytoplasm
PBANKA_144420	conserved Plasmodium protein, unknown function			PF3D7_1229600	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	protein binding	null	apicoplast, cytoplasm
PBANKA_144480	conserved Plasmodium protein, unknown function	-4.42	0.75	PF3D7_1230100	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_144640	conserved Plasmodium protein, unknown function			PF3D7_1231700	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_145210	conserved Plasmodium protein, unknown function			PF3D7_1237500	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	apicoplast, cytoplasm, membrane
PBANKA_145390	conserved Plasmodium protein, unknown function	-1.76	0.7	PF3D7_1239400	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	ATP binding, ligase activity	translation	cytoplasm
PBANKA_146130	conserved Plasmodium protein, unknown function	-5.22	0.75	PF3D7_1248400	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	null	null	apicoplast
PBANKA_146330	conserved Plasmodium protein, unknown function	-5.38	0.75	PF3D7_1250400	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	null	ATP binding, actin binding, calmodulin binding, motor activity	null	cytoplasm, myosin complex
PBANKA_100440	conserved Plasmodium protein, unknown function	-1.75	0.73	PF3D7_0406800	conserved Plasmodium protein, unknown function	unknown function	1	1	2	na	null	translation	null	null	
PBANKA_132380	conserved Plasmodium protein, unknown function	-5.5	0.75			unknown function	1	1	2	na	protein binding	null	null	null	
PBANKA_052190	conserved Plasmodium protein, unknown function			PF3D7_0420500	conserved Plasmodium protein, unknown function	phosphatase	1	1	2	na	protein tyrosine/serine/threonine phosphatase activity	protein dephosphorylation	null	null	
PBANKA_093040	conserved Plasmodium protein, unknown function			PF3D7_1117600.1/2	conserved Plasmodium protein, unknown function	translation	1	1	2	na	translation release factor activity	translational termination	null	null	
PBANKA_101540	CPW-WPC family protein	-2.61	0.73	PF3D7_1429300	CPW-WPC family protein	adhesin	1	1	2	na	null	null	null	null	null
PBANKA_112320	CPW-WPC family protein			PF3D7_0624300	CPW-WPC family protein	adhesin	1	1	2	na	null	null	null	null	membrane
PBANKA_135250	CPW-WPC family protein	-3.01	0.75	PF3D7_1338800	CPW-WPC family protein	adhesin	1	1	2	na	null	null	null	null	null
PBANKA_134630	CPW-WPC family protein (UIS19)	-3.77	0.73	PF3D7_1331400	CPW-WPC family protein	adhesin	1	1	2	na	null	null	null	null	apicoplast
PBANKA_094340	CPW-WPC family protein, putative	-2.54	0.75	PF3D7_1103500	CPW-WPC family protein	adhesin	1	1	2	na	null	null	null	null	apicoplast
PBANKA_144930	CPW-WPC family protein, putative	-2.93	0.74	PF3D7_1234700	CPW-WPC family protein	adhesin	1	1	2	na	null	null	null	null	null
PBANKA_132170	cysteine proteinase, putative			PF3D7_1458000	cysteine proteinase falcipain 1	protease	1	1	2	na	cysteine-type peptidase activity	proteolysis	null	null	
PBANKA_081910	cytochrome b5, putative			PF3D7_0918100	cytochrome b5-like heme/steroid binding protein, putative	utilization phospholipids	1	1	2	na	heme binding	null	null	null	
PBANKA_141020	cytochrome c2 precursor, putative			PF3D7_1311700	cytochrome c2 precursor, putative	redoxmeth	1	1	2	na	electron carrier activity, heme binding, iron ion binding	null	null	null	
PBANKA_051200	DHHC-type zinc finger protein, putative	-3.85	0.75	PF3D7_1027900	DHHC-type zinc finger protein, putative	palmytoylation; prenylation	1	1	2	na	zinc ion binding	null	null	null	
PBANKA_133460	diacylglycerol kinase, putative			PF3D7_1471400	diacylglycerol kinase, putative	utilization phospholipids	1	1	2	na	diacylglycerol kinase activity	protein kinase C-activating G-protein coupled receptor signaling pathway	null	null	
PBANKA_080620	e3 ubiquitin-protein ligase rbx1, putative (RBX1)			PF3D7_0319100	ubiquitin-protein ligase, putative	proteasome	1	1	2	na	protein binding, zinc ion binding	null	null	null	
PBANKA_122950	endonuclease III homologue, putative			PF3D7_0614800	endonuclease III homologue, putative	DNA repair	1	1	2	na	4 iron, 4 sulfur cluster binding, endonuclease activity	base-excision repair	null	null	
PBANKA_124280	eukaryotic translation initiation factor 3, subunit 6, putative			PF3D7_0528200	eukaryotic translation initiation factor 3, subunit 6, putative	translation	1	1	2	na	null	null	null	null	null
PBANKA_062250	exonuclease I, putative			PF3D7_0725000	exonuclease I, putative	DNA repair	1	1	2	na	DNA binding, nuclease activity	DNA repair	null	null	

PBANKA_052390	glideosome associated protein with multiple membrane spans 2, putative (GAPM2)			PF3D7_0423500	glideosome associated protein with multiple membrane spans 2 (GAPM2)	gliding motility	1	1	2	na	null	null	null	metal ion binding, protein binding	transport	actomyosin, actin part, inner membrane complex, integral to membrane, membrane
PBANKA_103540	glideosome associated protein with multiple membrane spans 3, putative	-2.56	0.7	PF3D7_1406800	glideosome associated protein with multiple membrane spans 3 (GAPM3)	gliding motility	1	1	2	na	null	null	null	null	null	inner membrane complex, integral to membrane, membrane
PBANKA_111530	glideosome-associated protein 40, putative (GAP40)	-4.69	0.75	PF3D7_0515700	glideosome-associated protein 40, putative (GAP40)	gliding motility	1	1	2	na	null	null	null	null	null	null
PBANKA_143760	glideosome-associated protein 45, putative	-4.44	0.74	PF3D7_1222700	glideosome-associated protein 45 (GAP45)	gliding motility	1	1	2	different in fertilization and ookinete	null	null	null	null	null	extrinsic to membrane, host cell membrane, inner membrane complex
PBANKA_145730	glucose inhibited division protein a homologue, putative			PF3D7_1244000	glucose inhibited division protein a homologue, putative	translation	1	1	2	na	flavin adenine dinucleotide binding	tRNA processing	null			
PBANKA_136430	glycerol kinase, putative	-2.86	0.73	PF3D7_1351600	glycerol kinase (GK)	glycolysis	1	1	2	KO not successful	glycerol kinase activity	carbohydrate metabolic process, glycerol-3-phosphate metabolic process	null			
PBANKA_136090	GTPase, putative			PF3D7_1348100	Rab14 GTPase, putative	trafficking	1	1	2	na	GTP binding	protein transport, small GTPase mediated signal transduction	null			
PBANKA_102520	h/aca ribonucleoprotein complex subunit 4, putative (CBF5)			PF3D7_1417500	pseudouridine synthase, putative	RNA	1	1	2	na	RNA binding, pseudouridine synthase activity	RNA processing, pseudouridine synthesis	null			
PBANKA_110190	HCNGP-like protein, putative			PF3D7_0502100	HCNGP-like protein	transcription	1	1	2	na	null	null	null	null	null	null
PBANKA_031000	heat shock 40 kDa protein, putative			PF3D7_0213100	heat shock protein 40, putative	chaperone	1	1	2	na	heat shock protein binding, unfolded protein binding	protein folding	null			
PBANKA_021480	heat shock protein, putative	-3.38	0.75			chaperone	1	1	2	KO not successful	heat shock protein binding, unfolded protein binding	protein folding	null			
PBANKA_120200	inner membrane complex protein 1c, putative (IMC1C, ALV5)	-4.82	0.75	PF3D7_1003600	membrane skeletal protein IMC1-related (ALV5)	gliding motility	1	1	2	na	null	null	null	null	cytoskeleton organization	inner membrane complex, subpellicular network
PBANKA_121910	inner membrane complex protein 1d, putative (IMC1D)	-10.18	0.75	PF3D7_0708600	heat shock protein 86 family protein	gliding motility	1	1	2	na	null	null	null	null	response to heat, response to unfolded protein	null
PBANKA_040270	inner membrane complex protein 1e, putative (IMC1E, ALV2)	-6.85	0.75	PF3D7_0304100	membrane skeletal protein IMC1-related (ALV2)	gliding motility	1	1	2	na	null	null	null	null	null	inner membrane complex
PBANKA_041760	LCCL domain-containing protein (CCp4)	-5.57	0.75	PF3D7_0903800	LCCL domain-containing protein (CCp4)	adhesin	1	1	2	different in oocyst and sporozoite, (tagged) different in fertilization and ookinete	null	null	null	null	null	null
PBANKA_131950	LCCL domain-containing protein CCP2 (CCP2)	-7.76	0.75	PF3D7_1455800	LCCL domain-containing protein (CCp2)	adhesin	1	1	2	different in fertilization, ookinete, oocyst and sporozoite	receptor binding	cell adhesion, signal transduction	null			
PBANKA_111770	malate dehydrogenase, putative (MDH)			PF3D7_0618500	malate dehydrogenase (MDH)	TCA	1	1	2	na	binding, oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor	glycolysis	null			
PBANKA_070710	membrane skeletal protein, putative	-5.38	0.75	PF3D7_0823500	membrane skeletal protein IMC1-related	gliding motility	1	1	2	na	null	null	null	null	null	null
PBANKA_081570	membrane transporter, putative	-4.44	0.75	PF3D7_0914700	transporter, putative	transporter	1	1	2	na	null	null	null	null	null	null
PBANKA_124210	methionine aminopeptidase, putative	-1.99	0.74	PF3D7_0527300	methionine aminopeptidase 1a, putative (MetAP1a)	post-translational modification	1	1	2	na	aminopeptidase activity, metalloexopeptidase activity	cellular process, proteolysis	null			
PBANKA_082600	methyltransferase, putative			PF3D7_0925200	rRNA processing and telomere maintaining methyltransferase, putative	RNA	1	1	2	na	null	null	null	null	null	null
PBANKA_092110	methyltransferase, putative	-1.61	0.7	PF3D7_1127300	methyltransferase, putative	RNA	1	1	2	na	tRNA (guanine-N7-)-methyltransferase activity	tRNA modification	null			
PBANKA_051520	MORN repeat-containing protein 1, putative (MORN1)			PF3D7_1031200	MORN repeat-containing protein 1 (MORN1)	lipid metabolism	1	1	2	na	null	null	null	null	null	null
PBANKA_141430	Myb1 protein, putative			PF3D7_1315800	Myb1-related transcription factor (MYB1)	transcription	1	1	2	na	DNA binding	null	null	null	null	null
PBANKA_145950	myosin light chain 1, putative, myosin A tail domain interacting protein M	-3.21	0.74	PF3D7_1246400	myosin light chain 1, myosin A tail domain interacting protein (MTIP)	gliding motility	1	1	2	(mutated) different in fertilization and ookinete	null	null	null	null	null	inner membrane complex
PBANKA_114340	NADH-cytochrome b5 reductase, putative			PF3D7_1367500	NADH-cytochrome b5 reductase, putative	fatty acids synth	1	1	2	na	electron carrier activity, oxidoreductase activity	null	null			
PBANKA_124110	nucleolar Jumonji domain interacting protein, putative	-3.72	0.75	PF3D7_0526300	nucleolar Jumonji domain interacting protein, putative	ribosome	1	1	2	na	null	null	null	null	null	null
PBANKA_090310	nucleolar preribosomal assembly protein, putative	-2.02	0.74	PF3D7_1146000	nucleolar preribosomal assembly protein, putative	ribosome assembly	1	1	2	na	null	null	null	null	null	null
PBANKA_103470	nucleolar preribosomal GTPase, putative			PF3D7_1407500	nucleolar preribosomal GTPase, putative	ribosome assembly	1	1	2	na	null	null	null	null	null	null
PBANKA_103340	oxidoreductase, putative			PF3D7_1409100	aldo-keto reductase, putative	redoxmeth	1	1	2	na	oxidoreductase activity	oxidation-reduction process	null			
PBANKA_020060	Pb-fam-1 protein					Pb-fam-1 protein	1	1	2	na	null	null	null	na	na	na

PBANKA_021490	Pb-fam-1 protein				Pb-fam-1 protein	1	1	2	na	null	null	null	na	na	na
PBANKA_110090	Pb-fam-1 protein	-1.64	0.71		Pb-fam-1 protein	1	1	2	na	null	null	null			
PBANKA_093220	peptidyl-prolyl cis-trans isomerase, putative			PF3D7_1115600	peptidyl-prolyl cis-trans isomerase (CYP19B)	1	1	2	not different from wild type	peptidyl-prolyl cis-trans isomerase activity	null	null			
PBANKA_124330	peptidyl-prolyl cis-trans isomerase, putative (CYP23)			PF3D7_0528700	peptidyl-prolyl cis-trans isomerase (CYP23)	1	1	2	na	peptidyl-prolyl cis-trans isomerase activity	null	null			
PBANKA_112040	Pfs77 homologue, putative	-4.93	0.75	PF3D7_0621400	Pf77 protein (ALV7)	1	1	2	na	null	null	null	null	null	inner membrane complex
PBANKA_050270	PHF5-like protein, putative			PF3D7_1018500	PHF5-like protein, putative	1	1	2	na	null	null	null	null	null	null
PBANKA_143490	phosphatidylethanolamine-binding protein, putative			PF3D7_1219700	raf kinase inhibitor (RKIP)	1	1	2	na	null	null	null	phosphatidylethanolamine binding, protein kinase regulator activity	null	null
PBANKA_133370	phosphodiesterase delta (PDEdelta)	-2.25	0.74	PF3D7_1470500	phosphodiesterase delta, putative (PDEdelta)	1	1	2	different in fertilization, ookinete and oocyst	3',5'-cyclic-nucleotide phosphodiesterase activity	signal transduction	null			
PBANKA_135590	phosphoenolpyruvate carboxykinase, putative (PEPCK)	-2.49	0.71	PF3D7_1342800	phosphoenolpyruvate carboxykinase (PEPCK)	1	1	2	na	ATP binding, phosphoenolpyruvate carboxykinase (ATP) activity	gluconeogenesis	null			
PBANKA_050690	phospholipid scramblase, putative			PF3D7_1022700	phospholipid scramblase 1, putative	1	1	2	na	null	null	null	null	null	null
PBANKA_040970	plasmepsin VI	-2.73	0.73	PF3D7_0311700	plasmepsin VI	1	1	2	different in oocyst and sporozoite	aspartic-type endopeptidase activity	proteolysis	null			
PBANKA_051760	plasmepsin VII, putative	-5.22	0.75	PF3D7_1033800	plasmepsin VII	1	1	2	na	aspartic-type endopeptidase activity	proteolysis	null			
PBANKA_132910	plasmepsin VIII, putative	-3.59	0.75	PF3D7_1465700	plasmepsin VIII	1	1	2	na	aspartic-type endopeptidase activity	proteolysis	null			
PBANKA_020040	Plasmodium exported protein, unknown function				unknown function	1	1	2	na	null	null	null	na	na	na
PBANKA_072260	Plasmodium exported protein, unknown function	-3.76	0.75		unknown function	1	1	2	na	null	null	null			
PBANKA_146510	Plasmodium exported protein, unknown function				unknown function	1	1	2	na	null	null	null			
PBANKA_120510	PPPDE peptidase, putative	-6.22	0.75	PF3D7_1006900	PPPDE peptidase, putative	1	1	2	na	null	null	null	null	null	null
PBANKA_051410	pre-mRNA-splicing factor ATP-dependent RNA helicase PRP22, putative (PRP22)			PF3D7_1030100	pre-mRNA-splicing factor ATP-dependent RNA helicase PRP22, putative (PRP22)	1	1	2	na	ATP binding, RNA binding, helicase activity	null	null			
PBANKA_083070	procollagen lysine 5-dioxygenase, putative	-3.61	0.75	PF3D7_0930000	procollagen lysine 5-dioxygenase, putative	1	1	2	na	null	null	null	null	null	null
PBANKA_141450	protein kinase, putative	-3.93	0.75	PF3D7_1316000	protein kinase, putative	1	1	2	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null			
PBANKA_131880	protein phosphatase 7, putative	-2.1	0.75	PF3D7_1455100	protein phosphatase, putative	1	1	2	na	protein tyrosine/serine/threonine phosphatase activity	protein dephosphorylation	null			
PBANKA_142700	protein phosphatase, putative			PF3D7_0810500	protein phosphatase, putative	1	1	2	na	catalytic activity	null	null			
PBANKA_031100	protein transport protein Sec31, putative (SEC31)			PF3D7_0214100	protein transport protein sec31 (SEC31)	1	1	2	na	null	null	null	null	ER to Golgi vesicle-mediated transport, translocation of peptides or proteins into host cell cytoplasm	COPII vesicle coat, ER to Golgi transport vesicle, Maurer's cleft, host cell cytoplasm
PBANKA_070900	protein-transport protein sec61 beta 1 subunit, putative			PF3D7_0821800	secretory complex protein 61 beta subunit (Sec61-beta)	1	1	2	na	null	null	null	protein binding, protein transporter activity	intracellular protein transport, protein transport by the Sec complex	Sec61 translocon complex, endoplasmic reticulum membrane
PBANKA_146000	rac-beta serine/threonine protein kinase, putative (PKB)			PF3D7_1246900	RAC-beta serine/threonine protein kinase (PKB)	1	1	2	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null			
PBANKA_093950	Rad51 homolog, putative	-7.81	0.75	PF3D7_1107400	Rad51 homolog (RAD51)	1	1	2	na	ATP binding, DNA-dependent ATPase activity, damaged DNA binding, protein binding	DNA repair	null			
PBANKA_051380	RAP protein, putative			PF3D7_1029800	RAP protein, putative	1	1	2	na	null	null	null	null	null	null
PBANKA_140730	recombinase, putative			PF3D7_1308800	recombinase, putative	1	1	2	na	DNA binding	DNA integration, DNA recombination	null			
PBANKA_123010	ribonuclease, putative, fragment					1	1	2	na	null	null	null	RNA binding, ribonuclease activity	RNA processing	null
PBANKA_031580	ribosome associated membrane protein RAMP4, putative			PF3D7_0219400.1/2	ribosome associated membrane protein RAMP4, putative	1	1	2	na	null	null	null	null	null	membrane
PBANKA_112140	RNA methyltransferase, putative			PF3D7_0622500	RNA methyltransferase, putative	1	1	2	na	methyltransferase activity	rRNA processing	null			

PBANKA_051470	RNA methyltransferase, putative			PF3D7_1030700	RNA methyltransferase, putative	RNA	1	1	2	na	RNA binding, RNA methyltransferase activity	RNA processing	null			
PBANKA_142950	RNA polymerase subunit 8c, putative			PF3D7_1213700	RNA polymerase subunit 8c, putative	mRNA	1	1	2	na	null	transcription, DNA-dependent	null			
PBANKA_071790	RNA-binding protein, putative			PF3D7_0416000	RNA binding protein, putative	mRNA	1	1	2	na	nucleic acid binding	null	null			
PBANKA_120080	RNA-binding protein, putative	-1.66	0.7	PF3D7_1002400.1/2	RNA binding protein, putative	mRNA	1	1	2	na	nucleic acid binding	null	null			
PBANKA_070750	RWD domain-containing protein, putative			PF3D7_0823100	RWD domain-containing protein, putative	proteasome	1	1	2	na	null	null	null	null	null	null
PBANKA_082310	S-adenosylmethionine synthetase, putative	-4.07	0.75	PF3D7_0922200	S-adenosylmethionine synthetase (SAMS)		1	1	2	na	ATP binding, methionine adenosyltransferase activity	one-carbon metabolic process	null			
PBANKA_123360	secreted ookinete protein, putative (PSOP13)			PF3D7_0518800	secreted ookinete protein, putative (PSOP13)	adhesin	1	1	2	different in oocyst and sporozoite	null	null	null	protein binding	null	nucleus
PBANKA_142170	secreted ookinete protein, putative (PSOP20)	-5.61	0.75	PF3D7_0715400	secreted ookinete protein, putative (PSOP20)	adhesin	1	1	2	not different from wild type	null	null	null	null	null	null
PBANKA_112900	secreted ookinete protein, putative (PSOP6)	-2.92	0.74	PF3D7_0630200	secreted ookinete protein, putative (PSOP6)	adhesin	1	1	2	KO not successful	null	null	null	nucleotide binding	null	cytoplasm
PBANKA_102700	serine C-palmitoyltransferase, putative	-3.3	0.75	PF3D7_1415700	serine C-palmitoyltransferase, putative	lipid metabolism	1	1	2	na	pyridoxal phosphate binding, transferase activity, transferring nitrogenous groups	biosynthetic process	null			
PBANKA_030500	serine repeat antigen 2 (SERA2)						1	1	2	not different from wild type	cysteine-type peptidase activity	proteolysis	null			
PBANKA_031140	serine/threonine protein kinase, putative	-4.17	0.75	PF3D7_0214600	serine/threonine protein kinase, putative	kinase	1	1	2	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null			
PBANKA_082850	serine/threonine protein phosphatase, putative			PF3D7_0927700	serine/threonine protein phosphatase, putative	phosphatase	1	1	2	na	hydrolase activity	null	null			
PBANKA_145310	sphingomyelin phosphodiesterase, putative	-5.54	0.75	PF3D7_1238600	sphingomyelin phosphodiesterase, putative	lipid metabolism	1	1	2	na	null	null	null	null	null	null
PBANKA_112400	sphingomyelin synthase 2, putative (SMS2)	-7.33	0.75	PF3D7_0625100	sphingomyelin synthase, putative	lipid metabolism	1	1	2	na	null	null	null	null	null	null
PBANKA_081070	subpellicular microtubule protein 1, putative (SPM1)			PF3D7_0909500	subpellicular microtubule protein 1, putative (SPM1)	gliding motility	1	1	2	na	null	null	null	null	null	null
PBANKA_082570	telomeric repeat binding factor 1, putative			PF3D7_0924800	telomeric repeat binding factor 1, putative (TRF1)	telomerase	1	1	2	na	DNA binding	null	null			
PBANKA_132090	thioredoxin, putative (TRX1)			PF3D7_1457200	thioredoxin 1 (TRX1)	redoxmeth	1	1	2	na	electron carrier activity, protein disulfide oxidoreductase activity	cell redox homeostasis, glycerol ether metabolic process	null			
PBANKA_131320	transcription factor with AP2 domain(s), putative (ApiAP2)	-2.49	0.75	PF3D7_1449500	transcription factor with AP2 domain(s), putative (ApiAP2)	transcription	1	1	2	na	sequence-specific DNA binding transcription factor activity	regulation of transcription, DNA-dependent	null			
PBANKA_134760	translation initiation factor 6, putative			PF3D7_1332800	translation initiation factor 6, putative	translation	1	1	2	na	ribosome binding	mature ribosome assembly	null			
PBANKA_124460	triose phosphate transporter, putative			PF3D7_0530200	triose phosphate transporter (iTPT)	transporter	1	1	2	na	null	null	null	glucose 6-phosphate:phosphate antiporter activity, triose-phosphate:phosphate antiporter activity	glucose import	apicoplast, integral to plastid inner membrane, membrane
PBANKA_080650	triosephosphate isomerase, putative			PF3D7_0318800	triosephosphate isomerase, putative	glycolysis	1	1	2	na	triose-phosphate isomerase activity	metabolic process	null			
PBANKA_103360	tRNA-dihydrouridine synthase, putative	-1.87	0.73	PF3D7_1408900	tRNA-dihydrouridine synthase, putative	translation	1	1	2	na	flavin adenine dinucleotide binding, tRNA dihydrouridine synthase activity	oxidation-reduction process, tRNA processing	null			
PBANKA_071200	U3 small nucleolar ribonucleoprotein, putative			PF3D7_0818800	U3 small nucleolar ribonucleoprotein protein, putative	mRNA	1	1	2	na	null	null	null	null	RNA processing	small nucleolar ribonucleoprotein complex
PBANKA_081610	ubiquitin conjugating enzyme, putative			PF3D7_0915100	ubiquitin conjugating enzyme, putative	proteasome	1	1	2	na	small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null			
PBANKA_102970	ubiquitin conjugating enzyme, putative			PF3D7_1412900.1	ubiquitin conjugating enzyme, putative	proteasome	1	1	2	na	small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null			
PBANKA_040420	ubiquitin-conjugating enzyme e2, putative			PF3D7_0305700	ubiquitin conjugating enzyme E2, putative	proteasome	1	1	2	na	small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null			
PBANKA_122890	von willebrand factor a-domain-related protein (WARP)	-5.64	0.75	PF3D7_0801300	von Willebrand factor A-domain related protein (WARP)	adhesin	1	1	2	not different from wild type	null	null	null	LBD domain binding, cell adhesion molecule binding, heparin binding cell adhesion		microneme lumen
PBANKA_060860	zinc finger protein, putative	-4.67	0.75	PF3D7_1210200	zinc finger protein, putative	nucleic acid binding	1	1	2	na	nucleic acid binding, zinc ion binding	null	null			
PBANKA_113490	zinc finger protein, putative	-6.57	0.75	PF3D7_1358600	zinc finger protein, putative	RNA binding	1	1	2	na	nucleic acid binding, zinc ion binding	null	null			
PBANKA_143340	zinc finger protein, putative			PF3D7_1217800	zinc finger protein, putative	Ca2+ binding	1	1	2	na	null	null	null	zinc ion binding	null	cytoplasm, nucleus

PBANKA_145800	zinc finger protein, putative			PF3D7_1244800	cytoplasmic translation machinery associated protein, putative	translation	1	1	2	na	null	null	null	null	null
PBANKA_010830	zinc finger protein, putative	-3.31	0.75	PF3D7_0609800	zinc finger protein, putative	nucleic acid binding	1	1	2	na	zinc ion binding	null	null	null	null
PBANKA_092730	zinc finger, DHHC-type, putative	-2.88	0.75	PF3D7_1121000	zinc finger, DHHC-type, putative	palmytoylation; prenylation	1	1	2	na	zinc ion binding	null	null	null	null
PBANKA_112550	conserved protein, unknown function			PF3D7_0626700	conserved protein, unknown function	unknown function	1	1	2	na	null	null	null	null	null
PBANKA_090010	conserved rodent malaria protein, unknown function					unknown function	1	1	2	na	null	null	null	na	na
PBANKA_093150	folate transporter 2, putative (FT2)	-4.21	0.75	PF3D7_1116500	folate transporter 2 (FT2)	transporter	1	1	2	na	folic acid transporter activity	null	plasma membrane		
PBANKA_144510	ATP-dependent protease subunit ClpQ, putative (ClpQ)			PF3D7_1230400	ATP-dependent protease subunit ClpQ (ClpQ)	protease	1	1	2	na	threonine-type endopeptidase activity	proteolysis involved in cellular protein catabolic process	proteasome core complex		
PBANKA_061160	ribonucleoside-diphosphate reductase, large subunit, putative			PF3D7_1437200	ribonucleoside-diphosphate reductase, large subunit	pyrimidine metabolism	1	1	2	na	ATP binding, protein binding, ribonucleoside-diphosphate reductase activity, thioesterin disulfide as acceptor	DNA replication, oxidation-reduction process	ribonucleoside-diphosphate reductase complex		
PBANKA_140800	h/aca ribonucleoprotein complex subunit 1, putative (GAR1)			PF3D7_1309500	small nucleolar ribonucleoprotein, putative	RNA	1	1	2	na	rRNA binding	rRNA processing	small nucleolar ribonucleoprotein complex		
PBANKA_100310	pre-mRNA-processing-splicing factor 8, putative (PRPF8)			PF3D7_0405400	pre-mRNA-processing-splicing factor 8, putative (PRPF8)	mRNA	1	1	2	na	null	nuclear mRNA splicing, via spliceosome	spliceosomal complex		
PBANKA_083300	profilin, putative (PFN)			PF3D7_0932200	profilin, putative (PFN)	gliding motility	1	0	1	(mutated) different in fertilization and ookinete	actin binding	cytoskeleton organization	actin cytoskeleton		
PBANKA_071690	conserved Plasmodium protein, unknown function			PF3D7_0414900	conserved ARM repeats protein, unknown function	centrosome, chromatin	0	1	1	na	binding	null	anchored to membrane, rhopty		
PBANKA_110790	triose phosphate transporter, putative			PF3D7_0508300	triose phosphate transporter (oTPT)	transporter, apicoplast	1	0	1	na	null	null	apicoplast, membrane		
PBANKA_143270	conserved Plasmodium protein, unknown function			PF3D7_1217100.1/2	conserved Plasmodium protein, unknown function	meiosis	0	1	1	na	ATP binding, DNA binding, catalytic activity	DNA metabolic process	chromosome		
PBANKA_101140	DNA topoisomerase II, putative			PF3D7_1433500	DNA topoisomerase II, putative	DNA replication	0	1	1	na	ATP binding, DNA topoisomerase (ATP-hydrolyzing) activity	DNA topological change	chromosome		
PBANKA_136000	DNA topoisomerase III, putative			PF3D7_1347100	DNA topoisomerase III, putative	DNA replication	0	1	1	na	DNA topoisomerase type I activity	DNA topological change	chromosome		
PBANKA_113720	Sec24 subunit, putative			PF3D7_1361100	Sec24 subunit a (SEC24a)	trafficking	0	1	1	na	protein binding, zinc ion binding	ER to Golgi vesicle-mediated transport, intracellular protein transport	COPII vesicle coat		
PBANKA_100280	Sec24-like protein, putative			PF3D7_0405100	Sec24 subunit b (SEC24b)	trafficking	1	0	1	na	protein binding	ER to Golgi vesicle-mediated transport, intracellular protein transport	COPII vesicle coat		
PBANKA_030910	peptide chain release factor subunit 1, putative			PF3D7_0212300	peptide chain release factor subunit 1, putative	translation	0	1	1	na	translation release factor activity, codon specific	translational termination	cytoplasm		
PBANKA_111050	translationally controlled tumor protein homolog, putative			PF3D7_0511000	translationally controlled tumor protein homolog, putative	trafficking	1	0	1	na	null	null	cytoplasm		
PBANKA_060280	ubiquitin-conjugating enzyme e2, putative			PF3D7_1203900	ubiquitin conjugating enzyme E2, putative (UBC)	proteasome	1	0	1	na	ubiquitin-protein ligase activity	post-translational protein modification, regulation of protein metabolic process	cytoplasm		
PBANKA_130990	leucine aminopeptidase, putative			PF3D7_1446200	M17 leucyl aminopeptidase (LAP)	protease	0	1	1	na	aminopeptidase activity, manganese ion binding, metalloexopeptidase activity	protein metabolic process, proteolysis	cytoplasm, intracellular		
PBANKA_123210	pre-mRNA-splicing factor, putative (SR1)			PF3D7_0517300	pre-mRNA-splicing factor (SR1)	mRNA	0	1	1	na	nucleic acid binding	RNA splicing	cytoplasm, nucleus		
PBANKA_103620	RNA-binding protein, putative			PF3D7_1406000	RNA binding protein, putative	mRNA	0	1	1	na	RNA binding	RNA processing	cytoplasm, nucleus		
PBANKA_132950	protein serine/threonine phosphatase, putative			PF3D7_1466100	protein serine/threonine phosphatase	phosphatase	1	0	1	different in fertilization, ookinete, oocyst and sporozoite	iron ion binding, manganese ion binding, phosphoprotein phosphatase activity	null	cytoplasm, nucleus		
PBANKA_082340	phosphoglycerate kinase, putative (PGK)			PF3D7_0922500	phosphoglycerate kinase (PGK)	glycolysis	0	1	1	na	phosphoglycerate kinase activity	glycolysis	cytosol		
PBANKA_110860	SNAP protein, putative			PF3D7_0509000	SNAP protein (soluble N-ethylmaleimide-sensitive factor Attachment Protein), putative	trafficking	0	1	1	na	null	intracellular protein transport	Golgi apparatus, endoplasmic reticulum		
PBANKA_120940	conserved Plasmodium protein, unknown function			PF3D7_1011000	conserved protein, unknown function	gliding motility	0	1	1	(tagged) different in fertilization, ookinete, oocyst, sporozoite and liver stage	null	null	inner membrane complex		
PBANKA_135850	conserved Plasmodium protein, unknown function			PF3D7_1345600	conserved Plasmodium protein, unknown function	gliding motility	1	0	1	na	null	null	inner membrane complex		
PBANKA_110780	longevity-assurance (LAG1) protein, putative			PF3D7_0508200	longevity-assurance (LAG1) domain protein, putative	ceramide biosynthesis	0	1	1	na	null	null	integral to membrane		
PBANKA_070270	rhomboid protease, putative			PF3D7_0828000	rhomboid protease ROM3 (ROM3)	rhomboid	0	1	1	different in oocyst and sporozoite; (tagged) also different in fertilization and ookinete	null	null	integral to membrane		

PBANKA_111780	conserved Plasmodium protein, unknown function, rhomboid protease ROM10, putative			PF3D7_0618600	rhomboid protease ROM10 (ROM10)	rhomboid	1	0	1	not different from wild type	null	null	integral to membrane
PBANKA_141300	cop-coated vesicle membrane protein p24 precursor, putative			PF3D7_1314500	cop-coated vesicle membrane protein p24 precursor, putative	trafficking	1	0	1	na	null	transport	integral to membrane
PBANKA_031330	MtN3-like protein			PF3D7_0216600	MtN3-like protein	trafficking	1	0	1	na	null	null	integral to membrane
PBANKA_110650	rhomboid protease, putative (ROM4)			PF3D7_0506900	rhomboid protease ROM4 (ROM4)	rhomboid	1	0	1	KO not successful	serine-type endopeptidase activity	null	integral to membrane
PBANKA_131230	SNARE protein, putative			PF3D7_1448600	SNARE protein, putative (VTI1)	trafficking	1	0	1	na	null	vesicle-mediated transport	integral to membrane
PBANKA_133990	SNARE protein, putative			PF3D7_1324700	SNARE protein, putative (YKT6.2)	trafficking	1	0	1	na	null	vesicle-mediated transport	integral to membrane
PBANKA_020700	calcium-transporting ATPase, putative (SERCA)			PF3D7_0106300	calcium-transporting ATPase (ATP6)	transporter	0	1	1	na	ATP binding, calcium-transporting ATPase activity	ATP biosynthetic process, calcium ion transport, metabolic process	integral to membrane, membrane
PBANKA_110310	actin-depolymerizing factor 1 (ADF1)			PF3D7_0503400	actin-depolymerizing factor 1 (ADF1)	gliding motility	0	1	1	KO not successful	actin binding	null	intracellular
PBANKA_131340	exosome complex exonuclease RRP6, putative (RRP6)			PF3D7_1449700	exosome complex exonuclease RRP6, putative (RRP6)	mRNA	0	1	1	na	3'-5' exonuclease activity, nucleic acid binding	nucleobase-containing compound metabolic process	intracellular
PBANKA_100810	GTPase, putative			PF3D7_1436500	conserved protein, unknown function	translation, transporter	0	1	1	na	GTP binding	null	intracellular
PBANKA_145990	signal recognition particle, beta subunit, putative			PF3D7_1246800	signal recognition particle receptor, beta subunit (SRPR-beta)	post-translational modification	0	1	1	na	GTP binding	intracellular protein transport, small GTPase mediated signal transduction	intracellular
PBANKA_132410	ubiquitin carboxyl-terminal hydrolase isozyme L3, putative (UCHL3)			PF3D7_1460400	ubiquitin carboxyl-terminal hydrolase isozyme L3 (UCHL3)	proteasome	0	1	1	na	ubiquitin thiolesterase activity	ubiquitin-dependent protein catabolic process	intracellular
PBANKA_130430	conserved Plasmodium protein, unknown function			PF3D7_1440400	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	zinc ion binding	null	intracellular
PBANKA_135410	Rab GTPase 11b			PF3D7_1340700	Rab GTPase 11b (RAB11b)	trafficking	1	0	1	na	GTP binding, GTPase activity, protein binding	intracellular protein transport, nucleocytoplasmic transport, small GTPase mediated signal transduction	intracellular
PBANKA_060770	zinc finger transcription factor, putative			PF3D7_1209300	zinc finger transcription factor (KROX1)	transcription	1	0	1	na	zinc ion binding	null	intracellular
PBANKA_100590	zinc-finger, RAN binding protein, putative			PF3D7_0408300	zinc finger, RAN binding protein, putative	transcription	1	0	1	na	zinc ion binding	null	intracellular
PBANKA_050710	CDGSH iron-sulfur domain-containing protein, putative			PF3D7_1022900	CDGSH iron-sulfur domain-containing protein, putative	intracellular Mb-bounded organelle	1	0	1	na	2 iron, 2 sulfur cluster binding	null	intracellular membrane-bounded organelle
PBANKA_140130	40S ribosomal protein S7, putative			PF3D7_1302800	40S ribosomal protein S7, putative	ribosome	0	1	1	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_123390	mitochondrial ribosomal protein L14 precursor, putative	-1.88	0.73	PF3D7_0519100	mitochondrial ribosomal protein L14 precursor, putative	ribosome mito	0	1	1	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_123720	mitochondrial ribosomal protein L17 precursor, putative	-2.23	0.75	PF3D7_0522500	mitochondrial ribosomal protein L17 precursor, putative	ribosome mito	0	1	1	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_145610	40S ribosomal protein S17, putative			PF3D7_1242700	40S ribosomal protein S17, putative	ribosome	1	0	1	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_090640	60S ribosomal protein L35ae, putative			PF3D7_1142600	60S ribosomal protein L35ae, putative	ribosome	1	0	1	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_091810	60S ribosomal protein L38e, putative			PF3D7_1130100	60S ribosomal protein L38e, putative	ribosome	1	0	1	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_135190	60S ribosomal protein L6-2, putative			PF3D7_1338200	60S ribosomal protein L6-2, putative	ribosome	1	0	1	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_081920	organelle ribosomal protein L3 precursor, putative			PF3D7_0918200	organelle ribosomal protein L3 precursor, putative	ribosome	1	0	1	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_120190	40S ribosomal protein S20e, putative			PF3D7_1003500	40S ribosomal protein S20e, putative	ribosome	1	0	1	na	structural constituent of ribosome	translation	intracellular, ribosome, small ribosomal subunit
PBANKA_101500	mitochondrial ribosomal protein L15 precursor, putative	-1.72	0.71	PF3D7_1429700	mitochondrial ribosomal protein L15 precursor, putative	ribosome mito	0	1	1	na	structural constituent of ribosome	translation	large ribosomal subunit
PBANKA_071880	small GTP-binding protein sar1, putative (SAR1)			PF3D7_0416800	small GTP-binding protein sar1 (SAR1)	trafficking	0	1	1	na	GTP binding	intracellular protein transport, small GTPase mediated signal transduction	Maurer's cleft, intracellular
PBANKA_120910	dolichyl-phosphate-mannose protein mannosyltransferase, putative			PF3D7_1010700	dolichyl-phosphate-mannose protein mannosyltransferase, putative	O-glycan biosynthesis	0	1	1	na	null	null	membrane
PBANKA_145500	mitochondrial carrier protein, putative	-2.26	0.75	PF3D7_1241600	mitochondrial carrier protein, putative	transporter	0	1	1	na	binding	transport	membrane
PBANKA_060110	mitochondrial phosphate carrier protein, putative			PF3D7_1202200	mitochondrial phosphate carrier protein (MPC)	transporter	0	1	1	na	binding	transport	membrane

PBANKA_010770	permease, putative	-2.25	0.75	PF3D7_0609100	Zn2 or Fe2 permease	acidocalcisome	0	1	1	na	metal ion transmembrane transporter activity	metal ion transport	membrane
PBANKA_050650	zinc transporter, putative			PF3D7_1022300	zinc transporter, putative	acidocalcisome	0	1	1	na	metal ion transmembrane transporter activity	metal ion transport	membrane
PBANKA_061040	ATPase, putative			PF3D7_1211900	non-SERCA-type Ca2 -transporting P-ATPase (ATP4)	acidocalcisome	1	0	1	na	ATP binding, ATPase activity, coupled to transmembrane movement of ions, phosphorylative mechanism	ATP biosynthetic process, cation transport, metabolic process	membrane
PBANKA_142710	conserved Plasmodium protein, unknown function	-3.76	0.75	PF3D7_0810400	conserved Plasmodium membrane protein, unknown function	unknown function	1	0	1	na	transporter activity	transport	membrane
PBANKA_101380	cytochrome c oxidase subunit II precursor, putative			PF3D7_1430900	cytochrome c oxidase subunit II precursor, putative	redoxmeth	1	0	1	na	copper ion binding, cytochrome-c oxidase activity	null	membrane
PBANKA_093900	ion channel protein, putative			PF3D7_1107900	mechanosensitive ion channel protein	transporter	1	0	1	na	null	null	membrane
PBANKA_141410	phosphatidylinositol synthase, putative (PIS)			PF3D7_1315600	phosphatidylinositol synthase (PIS)	inositol phosphate metabolism	1	0	1	na	phosphotransferase activity, for other substituted phosphate groups	phospholipid biosynthetic process	membrane
PBANKA_131620	SNARE protein, putative			PF3D7_1452500	SNARE protein, putative (P1Bet1)	trafficking	1	0	1	na	protein binding	Golgi vesicle transport	membrane
PBANKA_146340	adaptor-related protein complex 3, sigma 2 subunit, putative			PF3D7_1250500	adaptor-related protein complex 3, sigma 2 subunit, putative	trafficking	0	1	1	na	protein binding, protein transporter activity	intracellular protein transport, vesicle-mediated transport	membrane coat
PBANKA_136550	intra-erythrocytic P. berghei-induced structures protein 1 (IBIS1)						1	0	1	different in liver stage	null	null	membrane, symbiont-containing vacuole membrane
PBANKA_082420	perforin like protein 3 (PPLP3)	-2.93	0.75	PF3D7_0923300	perforin like protein 3 (PPLP3)	perforin	0	1	1	different in fertilization, ookinete and oocyst	null	null	microneme
PBANKA_021390	dynein light chain, putative			PF3D7_0729800	dynein light chain, putative	dynein/kinesin	0	1	1	na	microtubule motor activity	microtubule-based process	microtubule associated complex
PBANKA_030220	dynein light chain, putative			PF3D7_0204400	dynein light chain, putative	dynein/kinesin	1	0	1	na	microtubule motor activity	microtubule-based process	microtubule associated complex
PBANKA_083430	conserved Plasmodium protein, unknown function			PF3D7_0933500	conserved Plasmodium protein, unknown function	chromatin	0	1	1	na	null	microtubule cytoskeleton organization	microtubule organizing center, spindle pole
PBANKA_101010	mitochondrial import inner membrane translocase subunit tim17, putative			PF3D7_1434700	mitochondrial import inner membrane translocase subunit tim17, putative	transporter	0	1	1	na	protein transporter activity	protein transport	mitochondrial inner membrane
PBANKA_145630	mitochondrial import inner membrane translocase subunit, putative			PF3D7_1242900	mitochondrial import inner membrane translocase subunit, putative	transporter	0	1	1	na	null	protein import into mitochondrial inner membrane	mitochondrial intermembrane space protein transporter complex
PBANKA_111650	mitochondrial import receptor subunit, putative			PF3D7_0617000	mitochondrial import receptor subunit tom40, putative	transporter	1	0	1	na	voltage-gated anion channel activity	anion transport	mitochondrial outer membrane
PBANKA_142180	mitochondrial ATP synthase F1, epsilon subunit, putative			PF3D7_0715500	mitochondrial ATP synthase F1, epsilon subunit, putative	transporter	1	0	1	na	hydrogen ion transporting ATP synthase activity, rotational mechanism, proton-transporting ATPase activity, rotational mechanism	ATP synthesis coupled proton transport	mitochondrial proton-transporting ATP synthase complex, catalytic core F(1), mitochondrion
PBANKA_041330	mitochondrial ribosomal protein L29/L47 precursor, putative			PF3D7_0315500	mitochondrial ribosomal protein L29/L47 precursor, putative	ribosome mito	1	0	1	na	structural constituent of ribosome	translation	mitochondrial ribosome
PBANKA_092360	GrpE protein homolog, mitochondrial, putative (MGE1)	-2.7	0.75	PF3D7_1124700	co-chaperone GrpE, putative	chaperone, transporter	1	0	1	na	adenyl-nucleotide exchange factor activity, chaperone binding, protein homodimerization activity	protein folding, protein import into mitochondrial matrix	mitochondrion
PBANKA_102500	conserved Plasmodium protein, unknown function			PF3D7_1417700	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	nuclear periphery, nucleus
PBANKA_111700	histone H2A, putative (H2A)			PF3D7_0617800	histone H2A (H2A)	chaperone, chromatin	0	1	1	na	DNA binding	nucleosome assembly	nucleosome, nucleus
PBANKA_142060	histone H2B, putative			PF3D7_0714000	histone H2B variant, putative (H2Bv)	chaperone	1	0	1	(tagged) different in liver stage	DNA binding	nucleosome assembly	nucleosome, nucleus
PBANKA_143940	chromatin assembly protein, putative			PF3D7_1224500	chromatin assembly protein (ASF1), putative	chromatin	0	1	1	na	null	chromatin assembly or disassembly	nucleus
PBANKA_142770	RuvB DNA helicase, putative			PF3D7_0809700	RuvB DNA helicase, putative	DNA replication	0	1	1	na	ATP binding, ATP-dependent 5'-3' DNA helicase activity, ATPase activity, DNA helicase activity	null	nucleus
PBANKA_113440	conserved Plasmodium protein, unknown function			PF3D7_1358100	small subunit rRNA processing factor, putative	RNA	1	0	1	na	null	gene silencing	nucleus
PBANKA_113090	methyltransferase, putative	-2.13	0.74	PF3D7_1354300	large subunit rRNA methyltransferase, putative	RNA	1	0	1	na	methyltransferase activity, nucleic acid binding	rRNA methylation	nucleus
PBANKA_051140	peroxiredoxin, putative (nPrx, UIS16)			PF3D7_1027300	peroxiredoxin (nPrx)	redoxmeth	1	0	1	na	antioxidant activity, oxidoreductase activity	null	nucleus
PBANKA_090720	phd finger protein, putative			PF3D7_1141800	phd finger protein, putative	chromatin	1	0	1	na	protein binding, zinc ion binding	null	nucleus
PBANKA_111910	splicing factor 3A subunit 2, putative (SF3A2)			PF3D7_0619900	splicing factor 3A subunit 2, putative (SF3A2)	mRNA	1	0	1	na	nucleic acid binding, zinc ion binding	null	nucleus
PBANKA_133200	U2 snRNP auxiliary factor, putative			PF3D7_1468800	U2 snRNP auxiliary factor, putative	mRNA	1	0	1	na	RNA binding	mRNA processing	nucleus

PBANKA_040880	conserved Plasmodium protein, unknown function			PF3D7_0310800	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	apicoplast, integral to membrane, membrane
PBANKA_041140	conserved Plasmodium protein, unknown function			PF3D7_0313700.1/2	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_041560	conserved Plasmodium protein, unknown function			PF3D7_0905800	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	DNA binding, protein binding, translation elongation factor activity, zinc ion binding	DNA-dependent transcription, elongation, regulation of transcription from RNA polymerase II promoter, transcription, DNA-dependent	nucleus
PBANKA_050780	conserved Plasmodium protein, unknown function			PF3D7_1023600	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	ATP binding, motor activity, protein binding	null	cytoplasm
PBANKA_051600	conserved Plasmodium protein, unknown function			PF3D7_1032200	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_052200	conserved Plasmodium protein, unknown function			PF3D7_0420600	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_062020	conserved Plasmodium protein, unknown function			PF3D7_0722700	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	integral to membrane
PBANKA_071300	conserved Plasmodium protein, unknown function			PF3D7_0817800	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	metal ion binding, nucleotide binding	null	null
PBANKA_080140	conserved Plasmodium protein, unknown function			PF3D7_0703700	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_081510	conserved Plasmodium protein, unknown function	-3.06	0.75	PF3D7_0914100	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	ATP binding, motor activity, protein binding	null	cytoplasm
PBANKA_082930	conserved Plasmodium protein, unknown function			PF3D7_0928500	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	protein binding	null	null
PBANKA_092250	conserved Plasmodium protein, unknown function			PF3D7_1125800	kelch protein, putative	microtubule	0	1	1	na	null	null	null	null	null
PBANKA_092270	conserved Plasmodium protein, unknown function			PF3D7_1125600	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_092330	conserved Plasmodium protein, unknown function	-3.36	0.75	PF3D7_1125000	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	ATP binding, ATPase activity	transport	apicoplast, plasma membrane
PBANKA_092760	conserved Plasmodium protein, unknown function			PF3D7_1120700	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	integral to membrane, membrane, nucleus
PBANKA_092820	conserved Plasmodium protein, unknown function			PF3D7_1120000	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	ATP binding	null	cytoplasm
PBANKA_093060	conserved Plasmodium protein, unknown function			PF3D7_1117400	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	membrane
PBANKA_100320	conserved Plasmodium protein, unknown function			PF3D7_0405500	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_102600	conserved Plasmodium protein, unknown function			PF3D7_1416700	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	cytoplasm
PBANKA_103140	conserved Plasmodium protein, unknown function			PF3D7_1411100.1/2	conserved Plasmodium membrane protein, unknown function	unknown function	0	1	1	na	null	null	null	null	integral to membrane, plasma membrane
PBANKA_110750	conserved Plasmodium protein, unknown function			PF3D7_0507900	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	transport	integral to membrane, plasma membrane
PBANKA_111280	conserved Plasmodium protein, unknown function	-2.43	0.75	PF3D7_0513100	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	cytoplasm
PBANKA_111410	conserved Plasmodium protein, unknown function	-4.23	0.75	PF3D7_0514500	conserved Plasmodium membrane protein, unknown function	unknown function	0	1	1	na	null	null	null	null	membrane
PBANKA_111930	conserved Plasmodium protein, unknown function			PF3D7_0620100	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	cytoplasm
PBANKA_120530	conserved Plasmodium protein, unknown function			PF3D7_1007100	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_122170	conserved Plasmodium protein, unknown function			PF3D7_0711100	conserved Plasmodium membrane protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_123370	conserved Plasmodium protein, unknown function			PF3D7_0518900	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	cytoplasm
PBANKA_123470	conserved Plasmodium protein, unknown function			PF3D7_0519900	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	apicoplast
PBANKA_123810	conserved Plasmodium protein, unknown function			PF3D7_0523300	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	null
PBANKA_123840	conserved Plasmodium protein, unknown function			PF3D7_0523600	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na	null	null	null	null	cytoplasm
PBANKA_123870	conserved Plasmodium protein, unknown function			PF3D7_0523900	conserved Plasmodium membrane protein, unknown function	unknown function	0	1	1	na	null	null	G-protein coupled receptor activity	G-protein coupled receptor signaling pathway	integral to membrane, membrane

PBANKA_131290	conserved Plasmodium protein, unknown function			unknown function	0	1	1	na		null	null	na	na	na
PBANKA_131610	conserved Plasmodium protein, unknown function		PF3D7_1452400	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	null	cytoplasm, nucleus
PBANKA_131940	conserved Plasmodium protein, unknown function		PF3D7_1455700	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	null	cytoplasm
PBANKA_132190	conserved Plasmodium protein, unknown function		PF3D7_1458200	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	null	null
PBANKA_132240	conserved Plasmodium protein, unknown function		PF3D7_1458700	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	regulation of cell shape	mitochondrion
PBANKA_132880	conserved Plasmodium protein, unknown function		PF3D7_1465400	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	null	null
PBANKA_133910	conserved Plasmodium protein, unknown function		PF3D7_1323900	conserved Plasmodium protein, unknown function	Ca2+ binding, prot-prot interaction	0	1	1	na		null	null	protein transport	cytoplasm, nucleus
PBANKA_134110	conserved Plasmodium protein, unknown function		PF3D7_1326000	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	null	null
PBANKA_134420	conserved Plasmodium protein, unknown function		PF3D7_1329200	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	nucleotide binding	cytoplasm
PBANKA_135170	conserved Plasmodium protein, unknown function		PF3D7_1338000	conserved Plasmodium membrane protein, unknown function	unknown function	0	1	1	na		null	null	null	integral to membrane, membrane
PBANKA_136020	conserved Plasmodium protein, unknown function	-2.25	0.74	PF3D7_1347400	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	integral to membrane, plasma membrane
PBANKA_136360	conserved Plasmodium protein, unknown function			PF3D7_1350800	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	null
PBANKA_140290	conserved Plasmodium protein, unknown function			PF3D7_1304400	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	null
PBANKA_141010	conserved Plasmodium protein, unknown function	-6.66	0.75	PF3D7_1311600	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	membrane
PBANKA_141350	conserved Plasmodium protein, unknown function			PF3D7_1315000	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	integral to membrane, membrane
PBANKA_142920	conserved Plasmodium protein, unknown function	-3.32	0.75	PF3D7_1213400	conserved Plasmodium protein, unknown function	galactose metabolism	0	1	1	na		null	protein binding	cytoplasm, nucleus
PBANKA_143060	conserved Plasmodium protein, unknown function			PF3D7_1214800	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	apicoplast
PBANKA_143580	conserved Plasmodium protein, unknown function	-1.96	0.73	PF3D7_1220600	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	apicoplast, membrane
PBANKA_144780	conserved Plasmodium protein, unknown function			PF3D7_1233100	conserved protein, unknown function	unknown function	0	1	1	KO not successful		null	null	null
PBANKA_145220	conserved Plasmodium protein, unknown function			PF3D7_1237600	rRNA processing WD-repeat protein, putative	RNA	0	1	1	na		null	null	cytoplasm, nucleus
PBANKA_145550	conserved Plasmodium protein, unknown function			PF3D7_1242100	conserved Plasmodium protein, unknown function	unknown function	0	1	1	na		null	null	null
PBANKA_061530	conserved Plasmodium protein, unknown function	-3.55	0.75	PF3D7_0717600	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na		binding	null	null
PBANKA_101870	conserved Plasmodium protein, unknown function			PF3D7_1425900	conserved Plasmodium protein, unknown function	transcription	1	0	1	na		binding	null	null
PBANKA_103890	conserved Plasmodium protein, unknown function			PF3D7_1403100	conserved Plasmodium protein, unknown function	chromatin	1	0	1	na		binding	null	null
PBANKA_134700	conserved Plasmodium protein, unknown function	-1.99	0.72	PF3D7_1332200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na		DNA binding, alkylbase DNA N-glycosylase activity	base-excision repair	null
PBANKA_131310	conserved Plasmodium protein, unknown function	-3.93	0.75	PF3D7_1449400	DNA replication related protein, putative	DNA replication	1	0	1	na		DNA binding, nuclease activity, protein binding	DNA metabolic process	null
PBANKA_146240	cutA, putative			PF3D7_1249500	cutA, putative	protein binding, response to ion	0	1	1	na		null	response to metal ion	null
PBANKA_021130	cysteine desulfurase, putative (NFS)			PF3D7_0727200	cysteine desulfurase, putative (NFS)	thiamine (vitB1) metabolism	0	1	1	na		null	metabolic process	null
PBANKA_146070	dipeptidyl peptidase 2, putative (DPAP2)			PF3D7_1247800	dipeptidyl peptidase 2, putative (DPAP2)	post-translational modification	0	1	1	na		cysteine-type peptidase activity	proteolysis	null
PBANKA_092300	DNA-dependent RNA polymerase, putative			PF3D7_1125300	DNA-dependent RNA polymerase	transcription	0	1	1	na		DNA binding, DNA-directed RNA polymerase activity	transcription, DNA-dependent	null
PBANKA_040720	dual-specificity protein phosphatase, putative (YVH1)			PF3D7_0309000	dual specificity phosphatase (YVH1)	phosphatase	0	1	1	na		protein tyrosine/serine/threonine phosphatase activity	protein dephosphorylation	null

PBANKA_052420	early transcribed membrane protein (SEP2)			early transcribed membrane protein (ETRAMBP)	0	1	1	KO not successful (tagged) different in fertilization, oocysts, sporozoite and liver stage	null	null	null	null	null	null
PBANKA_103190	eukaryotic translation initiation factor 2 gamma subunit, putative			PF3D7_1410600	eukaryotic translation initiation factor 2 gamma subunit, putative	translation	0	1	1	na	GTP binding, GTPase activity	null	null	null
PBANKA_133430	exported protein 2, putative (EXP2)			PF3D7_1471100	exported protein 2 (EXP2)	trafficking	0	1	1	(tagged) different in sporozoite and liver stage	null	null	null	na
PBANKA_124710	fam-b protein					unknown function	0	1	1	na	null	null	null	na
PBANKA_131070	glutaminyl-peptide cyclotransferase, putative	-2.08	0.74	PF3D7_1446900	glutaminyl-peptide cyclotransferase, putative		0	1	1	na	null	null	null	na
PBANKA_130970	helicase, putative			PF3D7_1445900	DEAD/DEAH box ATP-dependent RNA helicase, putative	mRNA	0	1	1	na	ATP binding, ATP-dependent helicase activity, helicase activity, nucleic acid binding	null	null	na
PBANKA_071840	histone acetyltransferase, putative (HAT1)			PF3D7_0416400	histone acetyltransferase, putative (HAT1)	chromatin modifying proteins	0	1	1	na	histone acetyltransferase activity	chromatin modification	null	na
PBANKA_136440	inner membrane complex protein 1f, putative (IMC1F, ALV6)	-2.42	0.73	PF3D7_1351700	alveolin, putative (ALV6)	gliding motility	0	1	1	na	null	null	transferase activity	null
PBANKA_093890	IWS1-like protein, putative			PF3D7_1108000	IWS1-like protein, putative	transcription	0	1	1	na	null	null	null	null
PBANKA_050420	large subunit rRNA processing RRM protein, putative			PF3D7_1020000	large subunit rRNA processing RRM protein, putative	RNA	0	1	1	na	nucleic acid binding	null	null	null
PBANKA_030440	merozoite surface protein 4/5 (MSP4/5)			PF3D7_0207000	merozoite surface protein 4 (MSP4)	contaminant	0	1	1	na	null	null	null	integral to membrane
PBANKA_010300	mitochondrial ribosomal protein L41 precursor, putative			PF3D7_0604200	mitochondrial ribosomal protein L41 precursor, putative	ribosome mito	0	1	1	na	null	null	null	null
PBANKA_131830	mitochondrial ribosomal protein S11 precursor, putative			PF3D7_1454600	mitochondrial ribosomal protein S11 precursor, putative	ribosome mito	0	1	1	na	null	null	structural constituent of ribosome	translation
PBANKA_122690	mitogen-activated protein kinase organizer 1, putative			PF3D7_0803300	mitogen-activated protein kinase organizer 1, putative (PMORG1)	kinase	0	1	1	na	null	null	null	null
PBANKA_030720	monocarboxylate transporter, putative			PF3D7_0210300	monocarboxylate transporter, putative	glycolysis	0	1	1	na	null	null	monocarboxylic acid transmembrane transporter activity	monocarboxylic acid transport
PBANKA_020410	N-terminal acetyltransferase, putative			PF3D7_0109500	N-acetyltransferase, putative	chromatin modifying proteins	0	1	1	na	N-acetyltransferase activity	metabolic process	null	membrane
PBANKA_135060	nuclear movement protein, putative			PF3D7_1336800	nuclear movement protein, putative	microtubule	0	1	1	na	null	null	null	null
PBANKA_041630	nucleoporin NUP100/NSP100, putative	-1.63	0.7	PF3D7_0905100	nucleoporin NUP100/NSP100, putative (NUP100)	RNA	0	1	1	na	null	null	null	nuclear pore, nucleus
PBANKA_010740	ornithine aminotransferase, putative (OAT)			PF3D7_0608800	ornithine aminotransferase (OAT)	AA metabolism	0	1	1	na	pyridoxal phosphate binding, transaminase activity	null	null	null
PBANKA_093170	peptidyl-prolyl cis-trans isomerase, putative (CYP19C)			PF3D7_1116300	peptidyl-prolyl cis-trans isomerase (CYP19C)	chaperone	0	1	1	na	peptidyl-prolyl cis-trans isomerase activity	null	null	null
PBANKA_051620	phosphatidyl inositol glycan, class A, putative			PF3D7_1032400	N-acetylglucosaminyl-phosphatidylinositol biosynthetic protein, putative	GPI	0	1	1	na	null	GPI anchor biosynthetic process, biosynthetic process	null	lipid metabolic process
PBANKA_112810	phospholipase (PL)			PF3D7_0629300	phosphatidylcholine-sterol acyltransferase precursor, putative (PL)	utilization phospholipids	0	1	1	different in sporozoite and liver stage	phosphatidylcholine-sterol O-acyltransferase activity	lipid metabolic process	null	pentose-phosphate shunt, non-oxidative branch
PBANKA_020460	photosensitized INA-labeled protein 1, putative			PF3D7_0109000	photosensitized INA-labeled protein 1, Phil1, putative	gliding motility	0	1	1	na	null	null	null	null
PBANKA_122250	plasmepsin X			PF3D7_0808200	plasmepsin X	plasmepsin, protease	0	1	1	KO not successful	aspartic-type endopeptidase activity	proteolysis	null	null
PBANKA_000110	Plasmodium exported protein, unknown function						0	1	1	na	null	null	null	null
PBANKA_011090	PP-loop family protein, putative			PF3D7_0612600	PP-loop family protein, putative	translation	0	1	1	na	ATP binding	tRNA processing	null	translation
PBANKA_111420	ribose 5-phosphate epimerase, putative	-4.29	0.75	PF3D7_0514600	ribose 5-phosphate epimerase, putative	glycolysis	0	1	1	na	ribose-5-phosphate isomerase activity	pentose-phosphate shunt, non-oxidative branch	null	translation
PBANKA_113630	RNA-binding protein, putative	-1.66	0.71	PF3D7_1360100	RNA-binding protein, putative	mRNA	0	1	1	na	nucleic acid binding	null	null	null
PBANKA_051240	rna-processing protein ebp2, putative (EBP2)			PF3D7_1028300	nucleolar preribosomal assembly protein, putative	ribosome assembly	0	1	1	na	null	null	null	null
PBANKA_040780	SECIS-binding protein 2, putative (SBP2)			PF3D7_0309700	SECIS-binding protein 2, putative (SBP2); ribosomal protein 17aa, putative	ribosome	0	1	1	na	null	null	null	null
PBANKA_103780	secreted ookinete adhesive protein (SOAP)	-3.26	0.75	PF3D7_1404300	secreted ookinete adhesive protein (SOAP)	adhesin	0	1	1	different in fertilization, ookinete, oocyst, sporozoite and liver stage	null	null	null	apicoplast

PBANKA_122200	sin3 associated polypeptide p18 protein, putative			PF3D7_0711400	sin3 associated polypeptide p18-like protein	chromatin	0	1	1	na	null	null	null	transcription corepressor activity	regulation of transcription from RNA polymerase II promoter	histone deacetylase complex	
PBANKA_141880	SNARE protein, putative			PF3D7_1320500	SNARE protein, putative (SNAP23)	trafficking	0	1	1	na	null	null	null	SNAP receptor activity, protein binding	intracellular protein transport, regulation of vesicle fusion, vesicle-mediated transport	SNARE complex	
PBANKA_134980	sporozoite surface protein 2 (SSP2), thrombospondin-related anonymous protein (TRAP), S8			PF3D7_1335900	sporozoite surface protein 2 (TRAP)	gliding motility	0	1	1	different in sporozoite and liver stage	null	null	null	null	cellular component movement, entry into host	cytoplasm, membrane, microneme	
PBANKA_144500	subpellicular microtubule protein 2, putative (SPM2)	-6.63	0.75	PF3D7_1230300	subpellicular microtubule protein 2, putative (SPM2)	gliding motility	0	1	1	na	null	null	null	transferase activity	null	null	
PBANKA_112980	Tetratricopeptide repeat protein, putative	-2.65	0.75	PF3D7_0631000	Tetratricopeptide repeat protein, putative	chaperone	0	1	1	not different from wild type	null	null	null	null	null	null	
PBANKA_093230	transcription factor with AP2 domain(s), putative (ApiAP2)			PF3D7_1115500	transcription factor with AP2 domain(s), putative (ApiAP2)	transcription	0	1	1	na	sequence-specific DNA binding	transcription factor activity	regulation of transcription, DNA-dependent	null			
PBANKA_142390	translation initiation factor SU11, putative			PF3D7_0813600	translation initiation factor SU11, putative	translation	0	1	1	na	translation initiation factor activity	translational initiation	null				
PBANKA_130380	triose-phosphate isomerase, putative (TIM)			PF3D7_1439900	triosephosphate isomerase (TIM)	glycolysis	0	1	1	na	triose-phosphate isomerase activity	metabolic process	null				
PBANKA_062170	type 2A phosphatase-associated protein 42, putative (TAP42)			PF3D7_0724200	immunoglobulin-binding protein 1-related, putative		0	1	1	na	null		regulation of signal transduction, response to biotic stimulus	null			
PBANKA_114570	U2 small nuclear ribonucleoprotein A, putative			PF3D7_1369700	U1 small nuclear ribonucleoprotein a, putative	mRNA	0	1	1	na	protein binding		null				
PBANKA_062010	U3 snoRNA-associated small subunit rRNA processing protein, putative			PF3D7_0722600	nucleolar rRNA processing protein, putative	RNA	0	1	1	na	null		null	null	null	null	
PBANKA_082190	ubiquitin conjugating enzyme, putative			PF3D7_0921000.1	ubiquitin conjugating enzyme, putative	proteasome	0	1	1	na	small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null				
PBANKA_080600	ubiquitin-conjugating enzyme, putative			PF3D7_0319300	ubiquitin conjugating enzyme, putative	proteasome	0	1	1	na	small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null				
PBANKA_051770	ubiquitin-conjugating enzyme, putative			PF3D7_1033900	ubiquitin conjugating enzyme, putative	proteasome	0	1	1	na	ubiquitin-protein ligase activity	post-translational protein modification, protein ubiquitination, regulation of protein metabolic process	null				
PBANKA_141390	zinc finger (CCCH type) protein, putative			PF3D7_1315400	zinc finger (CCCH type) protein, putative	transcription	0	1	1	na	null		null	null	null	null	
PBANKA_090950	AAA family ATPase, putative			PF3D7_1139500.1/2	AAA family ATPase, putative	transporter	1	0	1	na	ATP binding, nucleoside-triphosphatase activity		null				
PBANKA_051980	acetyl-CoA transporter, putative			PF3D7_1036800	acetyl-CoA transporter, putative	TCA	1	0	1	na	null		null	null	null	membrane	
PBANKA_123990	acyl-CoA synthetase, putative			PF3D7_0525100	acyl-CoA synthetase (ACS10)	lipid metabolism	1	0	1	na	catalytic activity	metabolic process	null				
PBANKA_123560	adenosylhomocysteinase, putative (SAHH)			PF3D7_0520900	S-adenosyl-L-homocysteine hydrolase (SAHH)	AA metabolism	1	0	1	na	adenosylhomocysteinase activity, binding	one-carbon metabolic process	null				
PBANKA_103240	alpha/beta hydrolase, putative			PF3D7_1410100	alpha/beta hydrolase, putative	protease	1	0	1	na	null		null	null	null	membrane	
PBANKA_123330	ATP-dependent RNA helicase DDX23, putative (DDX23)			PF3D7_0518500	ATP-dependent RNA helicase DDX23, putative (DDX23)	mRNA	1	0	1	na	ATP binding, ATP-dependent helicase activity, helicase activity, nucleic acid binding		null				
PBANKA_010050	BIR protein					BIR protein	1	0	1	na	null		null	null			
PBANKA_060030	BIR protein					BIR protein	1	0	1	na	null		null	null	null	integral to membrane	
PBANKA_146530	BIR protein, pseudogene					BIR protein	1	0	1	na	null		null	null			
PBANKA_145260	calcyclin binding protein, putative			PF3D7_1238100	calcyclin binding protein, putative	proteasome	1	0	1	na	null		null	null	null	membrane	
PBANKA_094140	caltractin (centrin), putative (CEN4)			PF3D7_1105500	centrin-4 (CEN4)	chromatin	1	0	1	na	calcium ion binding		null				
PBANKA_123430	carbon catabolite repressor protein 4, putative (CCR4)			PF3D7_0519500	carbon catabolite repressor protein 4, putative (CCR4)	mRNA	1	0	1	na	null		null	null	null	null	
PBANKA_134430	chromatin assembly factor 1 subunit, putative			PF3D7_1329300	chromatin assembly factor 1 subunit, putative	chromatin	1	0	1	na	null		null	null	chromatin binding, histone binding, unfolded protein binding	chromatin assembly or disassembly	chromatin assembly complex
PBANKA_111460	conserved Plasmodium protein, unknown function			PF3D7_0515000	RNA recognition motif, putative	mRNA	1	0	1	na	nucleic acid binding		null	null			
PBANKA_010150	conserved Plasmodium protein, unknown function	-4.87	0.75	PF3D7_0602700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null		null	null	null	null	
PBANKA_010180	conserved Plasmodium protein, unknown function	-2.17	0.73	PF3D7_0603000	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null		null	null	null	cytoplasm, membrane	

PBANKA_081550	conserved Plasmodium protein, unknown function			PF3D7_0914500	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding	null	cytoplasm
PBANKA_082260	conserved Plasmodium protein, unknown function			PF3D7_0921700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	nucleotide binding	null	apicoplast, cytoplasm
PBANKA_082460	conserved Plasmodium protein, unknown function			PF3D7_0923700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	cytoplasm
PBANKA_082760	conserved Plasmodium protein, unknown function			PF3D7_0926800	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	receptor binding	cell differentiation, multicellular organismal development, signal transduction	extracellular region
PBANKA_083040	conserved Plasmodium protein, unknown function	-7.37	0.75	PF3D7_0929600	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	different to herbivores, snakes, squirrels and tree shrew. (tagged also different to mouse)	null	null	null	null
PBANKA_083500	conserved Plasmodium protein, unknown function			PF3D7_0934200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	structural constituent of ribosome	translation	intracellular, ribosome, small ribosomal subunit
PBANKA_083570	conserved Plasmodium protein, unknown function			PF3D7_0934900	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	membrane
PBANKA_090800	conserved Plasmodium protein, unknown function			PF3D7_1141000	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	cytoplasm
PBANKA_091290	conserved Plasmodium protein, unknown function					unknown function	1	0	1	na	null	null	null	null	null
PBANKA_093750	conserved Plasmodium protein, unknown function	-3.2	0.75	PF3D7_1110100	conserved Plasmodium protein, unknown function	lipid binding	1	0	1	na	null	null	calcium ion binding, diacylglycerol binding, protein binding, zinc ion binding	intracellular signal transduction	integral to membrane, plasma membrane
PBANKA_100350	conserved Plasmodium protein, unknown function			PF3D7_0405800	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_100500	conserved Plasmodium protein, unknown function			PF3D7_0407400	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding	null	null
PBANKA_100560	conserved Plasmodium protein, unknown function	-5.22	0.75	PF3D7_0408000	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_100790	conserved Plasmodium protein, unknown function	-2.55	0.74	PF3D7_0410700	GTPase, putative	translation	1	0	1	na	null	null	ATP binding	null	cytoplasm
PBANKA_101270	conserved Plasmodium protein, unknown function			PF3D7_1432200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	cytoplasm
PBANKA_101280	conserved Plasmodium protein, unknown function			PF3D7_1432100	conserved protein, unknown function	unknown function	1	0	1	na	null	null	voltage-gated anion channel activity	anion transport	external side of mitochondrial outer membrane, mitochondrial outer membrane, mitochondrion
PBANKA_101730	conserved Plasmodium protein, unknown function	-2.02	0.71	PF3D7_1427300	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding, actin binding, calmodulin binding	null	cytoplasm, myosin complex
PBANKA_101920	conserved Plasmodium protein, unknown function			PF3D7_1425300	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	cytoplasm
PBANKA_102480	conserved Plasmodium protein, unknown function			PF3D7_1417900	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_103180	conserved Plasmodium protein, unknown function			PF3D7_1410700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	apicoplast
PBANKA_103330	conserved Plasmodium protein, unknown function			PF3D7_1409200.2	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	apicoplast
PBANKA_103970	conserved Plasmodium protein, unknown function			PF3D7_1402200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding, glutamate-tRNA ligase activity	glutamyl-tRNA aminoacylation, translation	cytoplasm, membrane
PBANKA_110210	conserved Plasmodium protein, unknown function	-4.07	0.75	PF3D7_0502300	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	apicoplast
PBANKA_110530	conserved Plasmodium protein, unknown function			PF3D7_0505700	conserved Plasmodium membrane protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding, actin binding, calmodulin binding, motor activity	null	cytoplasm, myosin complex
PBANKA_111690	conserved Plasmodium protein, unknown function			PF3D7_0617300	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	4 iron, 4 sulfur cluster binding, electron carrier activity, iron ion binding, molybdenum ion binding, nitrate reductase activity	Mo-molybdopterin cofactor biosynthetic process, nitrate assimilation, oxidation-reduction process, transport	periplasmic space
PBANKA_112460	conserved Plasmodium protein, unknown function			PF3D7_0625700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_113070	conserved Plasmodium protein, unknown function			PF3D7_1354100	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_113130	conserved Plasmodium protein, unknown function			PF3D7_1354700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	GTP binding, GTPase activity, translation initiation factor activity	translation, translational initiation	intracellular
PBANKA_113800	conserved Plasmodium protein, unknown function			PF3D7_1362000	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_113950	conserved Plasmodium protein, unknown function			PF3D7_1363500	DNase I-like protein, putative	DNA repair	1	0	1	na	null	null	RNA binding, exonuclease activity, magnesium ion binding, nuclease activity, poly(A)-specific ribonuclease activity, protein binding	regulation of transcription, DNA-dependent, transcription, DNA-dependent	cytoplasm, nucleus
PBANKA_120180	conserved Plasmodium protein, unknown function	-3.57	0.75	PF3D7_1003400	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding, actin binding, calmodulin binding, motor activity	null	membrane, myosin complex

PBANKA_120350	conserved Plasmodium protein, unknown function			PF3D7_1005300	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	apicoplast, membrane
PBANKA_121060	conserved Plasmodium protein, unknown function			PF3D7_1012200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	apicoplast, membrane, nucleus
PBANKA_121330	conserved Plasmodium protein, unknown function	-2.24	0.7	PF3D7_1014900	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding, actin binding, calmodulin binding, motor activity	null	cytoplasm, membrane, myosin complex
PBANKA_121490	conserved Plasmodium protein, unknown function			PF3D7_0323600	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_122590	conserved Plasmodium protein, unknown function	-2.99	0.75	PF3D7_0804700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_123500	conserved Plasmodium protein, unknown function			PF3D7_0520200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	(+)-abscisic acid 8'-hydroxylase activity	null	null
PBANKA_123830	conserved Plasmodium protein, unknown function			PF3D7_0523500	outer arm dynein lc3, putative	dynein/kinesin	1	0	1	na	null	null	null	null	null
PBANKA_124440	conserved Plasmodium protein, unknown function			PF3D7_0530000	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	nucleus
PBANKA_130700	conserved Plasmodium protein, unknown function			PF3D7_1443100	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	nucleus
PBANKA_131530	conserved Plasmodium protein, unknown function	-4.48	0.75	PF3D7_1451600	LCCL-like protein (FNPA)	adhesin	1	0	1	different in oocyst and sporozoite (tagged) different in fertilization and ookinete	null	null	null	null	null
PBANKA_131590	conserved Plasmodium protein, unknown function			PF3D7_1452200	aminomethyltransferase, putative	post-translational processing	1	0	1	na	null	null	null	null	null
PBANKA_132250	conserved Plasmodium protein, unknown function			PF3D7_1458800	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	cytoplasm, membrane
PBANKA_133110	conserved Plasmodium protein, unknown function			PF3D7_1467800	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_134250	conserved Plasmodium protein, unknown function	-5.93	0.75	PF3D7_1327300	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding, actin binding, calmodulin binding, motor activity	null	cytoplasm, myosin complex
PBANKA_135310	conserved Plasmodium protein, unknown function			PF3D7_1339700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding, actin binding, calmodulin binding, motor activity	null	cytoplasm, myosin complex
PBANKA_135360	conserved Plasmodium protein, unknown function			PF3D7_1340200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_135950	conserved Plasmodium protein, unknown function	-1.79	0.7	PF3D7_1346600	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	structural molecule activity	null	null
PBANKA_140520	conserved Plasmodium protein, unknown function			PF3D7_1306700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	metal ion binding, nucleotide binding, protein binding, transferase activity	regulation of transcription, DNA-dependent	cytoplasm, membrane, nucleus
PBANKA_141720	conserved Plasmodium protein, unknown function	-6.69	0.75	PF3D7_1318700	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding	null	cytoplasm
PBANKA_142080	conserved Plasmodium protein, unknown function	-3.66	0.75	PF3D7_0714200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	ATP binding, protein binding	null	null
PBANKA_142140	conserved Plasmodium protein, unknown function			PF3D7_0715100	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	protein binding	regulation of transcription, DNA-dependent, transcription, DNA-dependent	cytoplasm, nucleus
PBANKA_142150	conserved Plasmodium protein, unknown function					unknown function	1	0	1	na	null	null	na	na	na
PBANKA_142300	conserved Plasmodium protein, unknown function			PF3D7_0814500	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null
PBANKA_144710	conserved Plasmodium protein, unknown function			PF3D7_1232400	conserved protein, unknown function	protein-protein interaction	1	0	1	na	null	null	null	null	null
PBANKA_145080	conserved Plasmodium protein, unknown function			PF3D7_1236200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	cytoplasm
PBANKA_145110	conserved Plasmodium protein, unknown function	-6.17	0.75	PF3D7_1236500	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	3-dehydroquinate dehydratase activity	aromatic amino acid family biosynthetic process	null
PBANKA_101760	conserved Plasmodium protein, unknown function			PF3D7_1427000	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	protein folding, protein transport	null	null	
PBANKA_130570	conserved Plasmodium protein, unknown function			PF3D7_1441800	SNF7 family protein, putative	large tethering	1	0	1	na	null	protein transport	null	null	
PBANKA_092140	conserved Plasmodium protein, unknown function			PF3D7_1127000	protein phosphatase, putative	phosphatase	1	0	1	na	phosphatase activity	dephosphorylation	null	null	
PBANKA_140330	conserved Plasmodium protein, unknown function					unknown function	1	0	1	na	phosphatase activity	null	null	null	
PBANKA_010580	conserved Plasmodium protein, unknown function			PF3D7_0607200	conserved Plasmodium membrane protein, unknown function	unknown function	1	0	1	na	protein binding, zinc ion binding	null	null	null	

PBANKA_092500	conserved Plasmodium protein, unknown function			PF3D7_1123300	conserved Plasmodium protein, unknown function	transcription	1	0	1	na	protein binding, zinc ion binding	null	null				
PBANKA_093270	conserved Plasmodium protein, unknown function (PCAS_091160:exon:5)			PF3D7_1115000	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null	null	null
PBANKA_041540	conserved Plasmodium protein, unknown function, pseudogene					unknown function	0	1	1	na	null	null	null	GPI anchor binding, heparan sulfate proteoglycan binding	B cell activation involved in immune response, cell-cell adhesion, entry into host cell	null	
PBANKA_121800	conserved Plasmodium protein, unknown function, pyrazinamidase/nicotin	-3.63	0.75	PF3D7_0320500	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	catalytic activity	metabolic process	null				
PBANKA_072080	conserved Plasmodium protein, unknown function			PF3D7_0418700	conserved Plasmodium protein, unknown function	RNA	0	1	1	na	null	null	null	null	null	nucleus	
PBANKA_060460	conserved protein, unknown function	-1.84	0.7	PF3D7_1205900	conserved protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null	integral to membrane, membrane	
PBANKA_000370	conserved rodent malaria protein, unknown function					unknown function	0	1	1	na	null	null	null				
PBANKA_000520	conserved rodent malaria protein, unknown function					unknown function	1	0	1	na	null	null	null				
PBANKA_122220	conserved rodent malaria protein, unknown function					unknown function	1	0	1	na	null	null	null	na	na	na	
PBANKA_142440	CS domain protein, putative			PF3D7_0813200	CS domain protein, putative	adhesin	1	0	1	na	null	null	null	null	null	null	
PBANKA_103230	cytidine triphosphate synthetase, putative			PF3D7_1410200	cytidine triphosphate synthetase	pyrimidine metabolism	1	0	1	na	CTP synthase activity	pyrimidine nucleotide biosynthetic process	null				
PBANKA_060080	cytochrome c oxidase assembly protein COX19, putative (COX19)	-1.74	0.71	PF3D7_1201800	cytochrome c oxidase assembly protein, putative	redoxmeth	1	0	1	na	null	null	null	na	na	na	
PBANKA_132630	cytochrome c1 precursor, putative			PF3D7_1462700	cytochrome c1 precursor, putative	redoxmeth	1	0	1	na	electron carrier activity, heme binding, iron ion binding	null	null				
PBANKA_031270	DEAD/DEAH helicase, putative	-3.02	0.75	PF3D7_0216000	DEAD/DEAH box helicase, putative	RNA metabolism	1	0	1	na	ATP binding, DNA binding, helicase activity	null	null				
PBANKA_041520	developmental protein, putative			PF3D7_0906100	developmental protein, putative	large tethering	1	0	1	na	null	protein transport	null				
PBANKA_102890	diphthamide synthesis protein, putative			PF3D7_1413800	diphthamide synthesis protein, putative	ribosome assembly	1	0	1	na	null	null	null	null	null	null	
PBANKA_130190	DNA repair metallo-beta-lactamase protein, putative			PF3D7_1474300	DNA repair metallo-beta-lactamase protein, putative	DNA repair	1	0	1	na	null	null	null	null	null	null	
PBANKA_070810	dynein light chain 1 (DLC1)			PF3D7_0822500	dynein light chain 1 (DLC1)	dynein/kinesin	1	0	1	na	protein binding	null	null				
PBANKA_093360	dynein light chain 2, putative			PF3D7_1114000	dynein light chain type 2, putative	dynein/kinesin	1	0	1	na	null	null	null	null	null	null	
PBANKA_120260	e3 ubiquitin-protein ligase, putative	-4.42	0.75	PF3D7_1004300	zinc finger, C3HC4 type, putative	proteasome	1	0	1	na	protein binding, zinc ion binding	null	null				
PBANKA_123250	eukaryotic translation initiation factor 3 subunit, putative			PF3D7_0517700	eukaryotic translation initiation factor, putative	translation	1	0	1	na	RNA binding, translation initiation factor activity	translational initiation	null				
PBANKA_050430	flagellar outer arm dynein-associated protein, putative			PF3D7_1020100	flagellar outer arm dynein-associated protein, putative	dynein/kinesin	1	0	1	na	null	null	null	null	null	membrane	
PBANKA_040470	glutaredoxin 1, putative (GRX1)			PF3D7_0306300	glutaredoxin 1 (GRX1)	redoxmeth	1	0	1	na	electron carrier activity, protein disulfide oxidoreductase activity	cell redox homeostasis	null				
PBANKA_041040	glycogen synthase kinase 3 (GSK3)			PF3D7_0312400	glycogen synthase kinase 3 (GSK3)	kinase	1	0	1	na	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null				
PBANKA_121030	heme oxygenase, putative (HO)			PF3D7_1011900	heme oxygenase (HO)	redoxmeth	1	0	1	na	null	null	null	ATP binding	null	apicoplast	
PBANKA_140790	HORMA domain protein, putative	-5.85	0.75	PF3D7_1309400	HORMA domain protein, putative	microtubule	1	0	1	na	null	mitosis	null				
PBANKA_061090	HSP40, subfamily A, putative			PF3D7_1437900	HSP40, subfamily A, putative	chaperone	1	0	1	na	heat shock protein binding, unfolded protein binding	protein folding	null				
PBANKA_093600	inositol-5 phosphatase, putative			PF3D7_1111800	peptidyl-prolyl cis-trans isomerase, putative	chaperone	1	0	1	na	null	null	null	null	null	null	
PBANKA_142880	iron-sulfur subunit of succinate dehydrogenase, putative			PF3D7_1212800	iron-sulfur subunit of succinate dehydrogenase	TCA	1	0	1	na	electron carrier activity, iron-sulfur cluster binding, oxidoreductase activity	tricarboxylic acid cycle	null				
PBANKA_135860	isocitrate dehydrogenase (NADP), mitochondrial precursor, putative (IDH)			PF3D7_1345700	isocitrate dehydrogenase (NADP), mitochondrial precursor (IDH)	TCA	1	0	1	na	NAD binding, isocitrate dehydrogenase (NADP+) activity, magnesium ion binding	isocitrate metabolic process, oxidation-reduction process	null				
PBANKA_120820	kinesin-4, putative					dynein/kinesin	1	0	1	na	ATP binding, microtubule motor activity	microtubule-based movement	null				

PBANKA_011020	lsm12, putative	-1.89	0.73	PF3D7_0611900	lsm12, putative	mRNA	1	0	1	na	null	null	null	null	null	null
PBANKA_122020	lysophospholipase, putative					lipase	1	0	1	na	null	null	na	na	na	na
PBANKA_090130	merozoite adhesive erythrocytic binding protein (MAEBL)					unknown function	1	0	1	different in sporozoite and liver stage	null	null	binding	null	apical complex, membrane	
PBANKA_120780	metallopeptidase, putative			PF3D7_1009500	metallopeptidase, putative	sumoylation	1	0	1	na	null	null	null	null	null	
PBANKA_101020	methionine aminopeptidase, type II, putative			PF3D7_1434600	methionine aminopeptidase 2 (MetAP2)	post-translational processing	1	0	1	na	aminopeptidase activity, metalloexopeptidase activity	cellular process, proteolysis	null			
PBANKA_051580	mitochondrial preribosomal assembly protein rimM precursor, putative			PF3D7_1032000	mitochondrial preribosomal assembly protein rimM precursor, putative	ribosome mito	1	0	1	na	null	rRNA processing	null			
PBANKA_020440	mRNA cleavage factor-like protein, putative			PF3D7_0109200	mRNA cleavage factor-like protein, putative	mRNA	1	0	1	na	null	null	null	null	null	
PBANKA_124070	NIMA related kinase 2 (NEK2)			PF3D7_0525900	NIMA related kinase 2 (NEK2)	kinase	1	0	1	different in fertilization, ookinete and oocyst	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null			
PBANKA_080560	O-sialoglycoprotein endopeptidase, putative			PF3D7_0708300	O-sialoglycoprotein endopeptidase, putative	protease	1	0	1	KO not successful	ATP binding, protein kinase activity	protein phosphorylation	null			
PBANKA_130030	Pb-fam-1 protein, fragment					Pb-fam-1 protein	1	0	1	na	null	null	na	na	na	na
PBANKA_100730	peptide chain release factor 2, putative			PF3D7_0409700	peptide chain release factor 2, putative	translation	1	0	1	na	translation release factor activity	translational termination	null			
PBANKA_080930	peptide deformylase, putative			PF3D7_0907900	peptide deformylase (PDF)	protease	1	0	1	na	iron ion binding, peptide deformylase activity	translation	null			
PBANKA_093580	peptidyl-prolyl cis-trans isomerase, putative			PF3D7_1113700	glyoxalase I (GloI)	redoxmeth	1	0	1	na	null	protein folding	null			
PBANKA_060140	peptidyl-prolyl cis-trans isomerase, putative (CYP26)			PF3D7_1202400	peptidyl-prolyl cis-trans isomerase (CYP26)	chaperone	1	0	1	na	peptidyl-prolyl cis-trans isomerase activity	null	null			
PBANKA_100480	peptidyl-tRNA hydrolase, putative			PF3D7_0407200	peptidyl-tRNA hydrolase PTH2, putative	translation	1	0	1	na	aminoacyl-tRNA hydrolase activity	translation	null			
PBANKA_112870	phosphatidylinositol/phosphatidylcholine transfer protein, putative			PF3D7_0629900	sec14-like cytosolic factor or phosphatidylinositol/phosphatidylcholine transfer protein, putative	trafficking	1	0	1	na	null	null	binding	vesicle-mediated transport	Golgi apparatus	
PBANKA_101450	plasmepsin IX, putative			PF3D7_1430200	plasmepsin IX	plasmepsin, protease	1	0	1	na	aspartic-type endopeptidase activity	proteolysis	null			
PBANKA_031610	Plasmodium exported protein, unknown function					unknown function	1	0	1	na	null	null	null			
PBANKA_000590	Plasmodium exported protein, unknown function, pseudogene					unknown function	1	0	1	na	null	null	null			
PBANKA_133720	protein transport protein sft2, putative			PF3D7_1321800	SFT2-like protein, putative	transporter, trafficking	1	0	1	na	null	null	null	null	membrane	
PBANKA_131720	pyridine nucleotide transhydrogenase, putative	-3.14	0.71	PF3D7_1453500	pyridine nucleotide transhydrogenase, putative	pyrimidine metabolism	1	0	1	na	NAD(P)+ transhydrogenase activity, binding, electron carrier activity	metabolic process, oxidation-reduction process	null			
PBANKA_121020	QF122 antigen, putative	-3.15	0.75	PF3D7_1011800	QF122 antigen	mRNA	1	0	1	na	RNA binding	null	null			
PBANKA_092470	RAP protein, putative			PF3D7_1123600	RAP protein, putative	mRNA	1	0	1	na	null	null	null	null	null	
PBANKA_040100	regulatory protein, putative			PF3D7_0302000	golgi organization and biogenesis factor, putative		1	0	1	na	null	null	null	null	null	
PBANKA_000160	reticulocyte binding protein, putative, fragment						1	0	1	na	null	null	null	null	null	
PBANKA_091460	RNA (uracil-5-)methyltransferase, putative	-4.16	0.75	PF3D7_1133800	RNA (uracil-5-)methyltransferase, putative	RNA	1	0	1	na	RNA methyltransferase activity	RNA processing	null			
PBANKA_061370	RNA binding protein, putative			PF3D7_0716000	RNA binding protein, putative	mRNA	1	0	1	na	nucleic acid binding	null	null			
PBANKA_081770	RNA-binding protein musashi, putative (HoMu)	-1.75	0.71	PF3D7_0916700	RNA-binding protein musashi, putative (HoMu)	mRNA	1	0	1	na	nucleic acid binding	null	null			
PBANKA_141920	RNA-binding protein, putative	-1.95	0.73	PF3D7_1320900	RNA-binding protein, putative	mRNA	1	0	1	na	nucleic acid binding	null	null			
PBANKA_113570	RNA-binding protein, putative			PF3D7_1359400	rRNA associated RNA binding protein, putative	RNA	1	0	1	na	RNA binding, protein binding	null	null			
PBANKA_081900	secreted acid phosphatase, putative,glideosome-associated protein 50,	-4.4	0.75	PF3D7_0918000	glideosome-associated protein 50,secreted acid phosphatase (GAP50)	gliding motility	1	0	1	na	null	null	protein anchor	null	endoplasmic reticulum, inner membrane complex	

PBANKA_110300	Ser/Arg-rich splicing factor, putative			PF3D7_0503300	Ser/Arg-rich splicing factor, putative	mRNA	1	0	1	na	nucleic acid binding	null	null			
PBANKA_030510	serine repeat antigen 1 (SERA1)			PF3D7_0207400	serine repeat antigen 7 (SERA7)	protease	1	0	1	not different from wild type	cysteine-type peptidase activity	proteolysis	null			
PBANKA_131370	serine/threonine protein kinase, putative			PF3D7_1450000	serine/threonine protein kinase, putative	kinase	1	0	1	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null			
PBANKA_141360	serine/threonine protein kinase, putative			PF3D7_1315100	serine/threonine protein kinase (PK9)	kinase	1	0	1	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null			
PBANKA_093250	SET domain protein, putative	-6.41	0.75	PF3D7_1115200	SET domain protein, putative (SET7)	chromatin modifying proteins	1	0	1	na	null	null	null	methytransferase activity, zinc ion binding	null	cytoplasm, nucleus
PBANKA_136300	small nuclear ribonucleoprotein E, putative (SNRPE)			PF3D7_1350200	small nuclear ribonucleoprotein E, putative (SNRPE)	mRNA	1	0	1	na	null	null	null	null	RNA processing, RNA splicing, via transesterification reactions	small nucleolar ribonucleoprotein complex
PBANKA_081100	small nuclear ribonucleoprotein Sm D3, putative (SNRPD3)			PF3D7_0909800	small nuclear ribonucleoprotein Sm D3, putative (SNRPD3)	mRNA	1	0	1	na	null	null	null	null	null	null
PBANKA_102790	small nuclear ribonucleoprotein-associated protein B, putative (SNRPB)			PF3D7_1414800	small nuclear ribonucleoprotein-associated protein B, putative (SNRPB)	mRNA	1	0	1	na	null	null	null	null	RNA splicing	spliceosomal complex
PBANKA_102320	splicing factor 3B subunit 4, putative (SF3B4)			PF3D7_1420000	splicing factor 3B subunit 4, putative (SF3B4)	mRNA	1	0	1	na	nucleic acid binding	null	null			
PBANKA_113680	SUMO ligase, putative			PF3D7_1360700	SUMO ligase, putative	sumoylation	1	0	1	na	zinc ion binding	null	null			
PBANKA_112240	superoxide dismutase, putative			PF3D7_0623500	superoxide dismutase (SOD2)	redoxmeth	1	0	1	na	metal ion binding, superoxide dismutase activity	oxidation-reduction process, superoxide metabolic process	null			
PBANKA_101850	transcription factor 3b, putative			PF3D7_1426100	basic transcription factor 3b, putative	transcription	1	0	1	na	null	null	null	null	null	nascent polypeptide-associated complex, transcription factor complex
PBANKA_130580	transcription factor TFIIH complex subunit Tfb5, putative			PF3D7_1441900	transcription factor TFIIH complex subunit Tfb5, putative	transcription	1	0	1	na	DNA binding	nucleotide-excision repair	null			
PBANKA_131970	transcription factor with AP2 domain(s), putative (ApiAP2)			PF3D7_1456000	transcription factor with AP2 domain(s) (ApiAP2)	transcription	1	0	1	na	sequence-specific DNA binding transcription factor activity	regulation of transcription, DNA-dependent	null			
PBANKA_123690	transcription initiation factor tfiid subunit 10, putative (TAF10)			PF3D7_0522200	conserved Plasmodium protein, unknown function	unknown function	1	0	1	na	null	null	null	null	null	cytoplasm
PBANKA_134160	translation initiation factor EIF-2B gamma subunit, putative			PF3D7_1326400	translation initiation factor EIF-2B gamma subunit, putative	translation	1	0	1	na	transferase activity	null	null			
PBANKA_093990	U6 snRNA-associated Sm-like protein LSM4, putative (LSM4)			PF3D7_1107000	U6 snRNA-associated Sm-like protein LSM4, putative (LSM4)	mRNA	1	0	1	na	null	null	null	null	null	null
PBANKA_060760	U6 snRNA-associated Sm-like protein LSM7, putative (LSM7)			PF3D7_1209200	U6 snRNA-associated Sm-like protein LSM7, putative (LSM7)	mRNA	1	0	1	na	null	null	null	null	RNA splicing, via transesterification reactions, nuclear mRNA splicing, via spliceosome	nucleus, small nucleolar ribonucleoprotein complex, spliceosomal complex
PBANKA_101770	ubiquinol-cytochrome c reductase hinge protein, putative			PF3D7_1426900	ubiquinol-cytochrome c reductase hinge protein, putative	redoxmeth	1	0	1	na	ubiquinol-cytochrome-c reductase activity	mitochondrial electron transport, ubiquinol to cytochrome c	null			
PBANKA_124200	ubiquitin carboxyl-terminal hydrolase, putative			PF3D7_0527200	ubiquitin carboxyl-terminal hydrolase, putative	proteasome	1	0	1	na	ubiquitin thiolesterase activity	ubiquitin-dependent protein catabolic process	null			
PBANKA_091060	ubiquitin-related modifier 1, putative (URM1)			PF3D7_1138100	ubiquitin related modifier homologue	proteasome	1	0	1	na	null	null	null	null	null	null
PBANKA_102290	zinc finger protein, putative			PF3D7_1420300	zinc finger protein, putative	transporter	1	0	1	na	null	null	null	null	null	null
PBANKA_123760	zinc finger protein, putative, fragment	-1.78	0.7	PF3D7_0522900	zinc finger protein, putative	RNA binding	1	0	1	na	nucleic acid binding, zinc ion binding	null	null	null	null	null
PBANKA_071430	small heat shock protein HSP20 (HSP20)	-4.76	0.75	PF3D7_0816500	small heat shock protein HSP20, putative (HSP20)	chaperone	0	1	1	differs in localization, cellular, sporozoite and liver stage. (tagged: different to oocyst bc)	null	null	plasma membrane			
PBANKA_123400	vacuolar ATP synthetase, putative			PF3D7_0519200	vacuolar ATP synthetase	vacuolar ATP synthase	0	1	1	na	hydrogen ion transmembrane transporter activity	ATP synthesis coupled proton transport	proton-transporting V-type ATPase, V0 domain			
PBANKA_090890	vacuolar ATP synthase subunit f, putative			PF3D7_1140100	vacuolar ATP synthase subunit f, putative	vacuolar ATP synthase	0	1	1	na	hydrogen ion transporting ATP synthase activity, rotational mechanism, proton-transporting ATPase activity, rotational mechanism	ATP synthesis coupled proton transport	proton-transporting V-type ATPase, V1 domain			
PBANKA_093200	rhoptry neck protein 4, putative (RON4)			PF3D7_1116000	rhoptry neck protein 4 (RON4)		1	0	1	(mutated) different in sporozoite and liver stage	null	null	rhoptry			
PBANKA_133830	60S ribosomal protein L6, putative			PF3D7_1323100	60S ribosomal protein L6, putative	ribosome	1	0	1	na	rRNA binding, structural constituent of ribosome	translation	ribosome			
PBANKA_144620	DIM1 protein homolog, putative			PF3D7_1231500	DIM1 protein homolog, putative	ribosome assembly	0	1	1	na	null	mitosis	spliceosomal complex			
PBANKA_131780	tRNA intron endonuclease, putative			PF3D7_1454100	tRNA intron endonuclease, putative	translation	0	1	1	na	tRNA-intron endonuclease activity	tRNA splicing, via endonucleolytic cleavage and ligation	tRNA-intron endonuclease complex			
PBANKA_000330	BIR protein					BIR protein	0	0	0	na	null	null	null			

PBANKA_000340	BIR protein			BIR protein	0	0	0	na	null	null	null	
PBANKA_000380	BIR protein			BIR protein	0	0	0	na	null	null	null	
PBANKA_000490	conserved rodent malaria protein, unknown function			unknown function	0	0	0	na	null	null	null	
PBANKA_000570	BIR protein			BIR protein	0	0	0	na	null	null	null	
PBANKA_010060	schizont membrane associated cytoadherence protein (SMAC)				0	0	0	na	null	cytoadherence to microvasculature, mediated by symbiont protein	host cell cytoplasm	
PBANKA_010070	Plasmodium exported protein, unknown function			unknown function	0	0	0	na	null	null	null	
PBANKA_010080	conserved Plasmodium protein, unknown function		PF3D7_0602000	conserved Plasmodium protein, unknown function	microtubule	0	0	0	na	null	null	
PBANKA_010270	conserved Plasmodium protein, unknown function		PF3D7_0603900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	
PBANKA_010410	aurora-related kinase 1, putative (ARK1)		PF3D7_0605300	serine/threonine protein kinase (ARK1)	kinase	0	0	0	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	
PBANKA_010470	long chain polyunsaturated fatty acid elongation enzyme, putative		PF3D7_0605900	long chain polyunsaturated fatty acid elongation enzyme, putative	fatty acids synth	0	0	0	na	null	null	
PBANKA_010560	translation initiation factor IF-2, putative		PF3D7_0607000	translation initiation factor IF-2, putative	translation	0	0	0	na	GTP binding, GTPase activity	null	
PBANKA_010860	Pre-mRNA-splicing factor SLU7, putative (SLU7)		PF3D7_0610100	Pre-mRNA-splicing factor SLU7, putative (SLU7)	mRNA	0	0	0	na	null	null	
PBANKA_010870	conserved Plasmodium protein, unknown function	-1.9	0.73	PF3D7_0610200	conserved Plasmodium protein, unknown function	mRNA	0	0	0	na	nucleic acid binding	mRNA processing
PBANKA_011000	60S ribosomal protein L39, putative		PF3D7_0611700	60S ribosomal protein L39, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	
PBANKA_011030	conserved Plasmodium protein, unknown function		PF3D7_0612000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	
PBANKA_011050	leucine-rich repeat protein (LRR6)	-2.6	0.72	PF3D7_0612200	leucine-rich repeat protein (LRR6)	kinase	0	0	0	na	protein binding	null
PBANKA_011130	conserved Plasmodium protein, unknown function		PF3D7_0613000.1/2	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	
PBANKA_020020	Pb-fam-1 protein			Pb-fam-1 protein		0	0	0	na	null	null	
PBANKA_020090	conserved rodent malaria protein, unknown function			unknown function		0	0	0	na	null	null	
PBANKA_020160	early transcribed membrane protein (ETRAMP)			early transcribed membrane protein (ETRAMP)		0	0	0	na	null	null	
PBANKA_020190	conserved Plasmodium protein, unknown function		PF3D7_0111900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	
PBANKA_020420	tubulin-specific chaperone a, putative		PF3D7_0109400	tubulin-specific chaperone a, putative	chaperone	0	0	0	na	unfolded protein binding	tubulin complex assembly	
PBANKA_020470	conserved Plasmodium protein, unknown function		PF3D7_0108800	conserved Plasmodium protein, unknown function	transporter	0	0	0	na	binding	transport	
PBANKA_020510	mitochondrial carrier protein, putative		PF3D7_0108400.1/2	mitochondrial carrier protein, putative	transporter	0	0	0	na	binding	transport	
PBANKA_020580	serine/threonine protein kinase, putative (IK2)		PF3D7_0107600	serine/threonine protein kinase, putative, EIK2	kinase	0	0	0	where in hemolysis, oocyst, oocyst, sporozoite and low stage (post-infectious stage)	ATP binding, protein serine/threonine kinase activity	protein phosphorylation	
PBANKA_020630	centrin, putative		PF3D7_0107000	centrin-1 (CEN1)	chromatin	0	0	0	na	calcium ion binding	null	
PBANKA_020650	Rab5c, GTPase, putative		PF3D7_0106800	Rab GTPase 5c (RAB5c)	trafficking	0	0	0	na	GTP binding, GTPase activity, protein binding	intracellular protein transport, nucleocytoplasmic transport, small GTPase mediated signal transduction	
PBANKA_020720	vacuolar ATP synthase subunit c, putative		PF3D7_0106100	vacuolar ATP synthase subunit c, putative	vacuolar ATP synthase	0	0	0	na	hydrolase activity, acting on acid anhydrides, catalyzing transmembrane movement of substances	ATP synthesis coupled proton transport	
PBANKA_020760	asparagine-rich antigen, putative					0	0	0	na	null	null	
PBANKA_020930	actin-related protein (ARP1)		PF3D7_0103800	actin-related protein (ARP1)	gliding motility	0	0	0	KO not successful	protein binding	null	
PBANKA_021120	conserved Plasmodium protein, unknown function		PF3D7_0727100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	

PBANKA_021210	eukaryotic translation initiation factor 2 alpha subunit, putative			PF3D7_0728000	eukaryotic translation initiation factor 2 alpha subunit, putative	translation	0	0	0	na	RNA binding, translation initiation factor activity	translation	eukaryotic translation initiation factor 2 complex
PBANKA_021300	RNA-binding protein, putative			PF3D7_0728900	RNA binding protein, putative	mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_021310	signal recognition particle subunit srp9, putative (SRP9)			PF3D7_0729000	signal recognition particle SRP9 (SRP9)	post-translational modification	0	0	0	na	7S RNA binding, protein binding	SRP-dependent cotranslational protein targeting to membrane, negative regulation of translational elongation	signal recognition particle
PBANKA_030060	Plasmodium exported protein, unknown function					unknown function	0	0	0	na	null	null	null
PBANKA_030110	conserved Plasmodium protein, unknown function	-2.99	0.75	PF3D7_0203200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_030120	ERCC1 nucleotide excision repair protein, putative			PF3D7_0203300	ERCC1 nucleotide excision repair protein, putative	DNA repair	0	0	0	na	damaged DNA binding, endonuclease activity	DNA repair	nucleus
PBANKA_030150	nucleolar preribosomal assembly protein, putative			PF3D7_0203700	nucleolar preribosomal assembly protein, putative	ribosome assembly	0	0	0	na	null	null	null
PBANKA_030250	hexose transporter (HT)			PF3D7_0204700	hexose transporter (HT)	glycolysis	0	0	0	na	substrate-specific transmembrane transporter activity	transmembrane transport, transport	integral to membrane, membrane
PBANKA_030620	phospholipase A2, putative			PF3D7_0209100	phospholipase A2, putative	utilization phospholipids	0	0	0	na	null	lipid metabolic process	null
PBANKA_030680	ATP-dependent RNA helicase UAP56, putative (UAP56)			PF3D7_0209800	ATP-dependent RNA helicase UAP56 (UAP56)	mRNA	0	0	0	na	ATP binding, ATP-dependent helicase activity, helicase activity, nucleic acid binding	null	null
PBANKA_031020	conserved Plasmodium protein, unknown function			PF3D7_0213300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_031190	RING zinc finger protein, putative			PF3D7_0215100	RING zinc finger protein, putative	proteasome	0	0	0	na	protein binding, zinc ion binding	null	null
PBANKA_031240	DNA-directed RNA polymerase II second largest subunit, putative			PF3D7_0215700	DNA-directed RNA polymerase II second largest subunit, putative	transcription	0	0	0	na	DNA binding, DNA-directed RNA polymerase activity, ribonucleoside binding	transcription, DNA-dependent	null
PBANKA_031250	origin recognition complex subunit 5, putative (ORC5)			PF3D7_0215800	origin recognition complex subunit 5 (ORC5)	DNA replication	0	0	0	na	null	null	null
PBANKA_031410	conserved Plasmodium protein, unknown function			PF3D7_0217400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_031420	calcium dependent protein kinase 1 (CDPK1)			PF3D7_0217500	calcium dependent protein kinase 1 (CDPK1)	kinase	0	0	0	na	ATP binding, calcium ion binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_031450	40S ribosomal protein S26e, putative			PF3D7_0217800	40S ribosomal protein S26e, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_031560	40S ribosomal protein S30, putative			PF3D7_0219200	40S ribosomal protein S30, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_031600	replication factor C subunit 1, putative			PF3D7_0219600	replication factor C subunit 1, putative	DNA replication	0	0	0	na	ATP binding, DNA clamp loader activity	DNA replication	DNA replication factor C complex, intracellular
PBANKA_031620	Plasmodium exported protein, unknown function, fragment					unknown function	0	0	0	na	null	null	null
PBANKA_040040	BIR protein, pseudogene					BIR protein	0	0	0	na	null	null	null
PBANKA_040230	dihydroipoamide acyltransferase, putative			PF3D7_0303700	dihydroipoamide acyltransferase, putative	glycolysis, TCA	0	0	0	na	transferase activity, transferring acyl groups	metabolic process	null
PBANKA_040300	60S ribosomal protein L44, putative			PF3D7_0304400	60S ribosomal protein L44, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_040340	conserved Plasmodium protein, unknown function			PF3D7_0304900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_040410	AP endonuclease (DNA-[apurinic or apyrimidinic site] lyase), putative			PF3D7_0305600	AP endonuclease (DNA-[apurinic or apyrimidinic site] lyase), putative	DNA repair	0	0	0	na	nuclease activity	DNA repair	null
PBANKA_040440	conserved Plasmodium protein, unknown function			PF3D7_0306000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_040530	40S ribosomal protein S23, putative			PF3D7_0306900	40S ribosomal protein S23, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome, small ribosomal subunit
PBANKA_040550	60S ribosomal protein L7, putative			PF3D7_0307200	60S ribosomal protein L7, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, large ribosomal subunit, ribosome
PBANKA_040570	ATP-dependent Clp protease proteolytic subunit, putative (ClpP)			PF3D7_0307400	ATP-dependent Clp protease proteolytic subunit (ClpP)	chaperone	0	0	0	na	serine-type endopeptidase activity	proteolysis	apicoplast
PBANKA_040600	conserved Plasmodium protein, unknown function			PF3D7_0307700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	DNA binding	null	null
PBANKA_040650	TCP-1/cpn60 chaperonin, putative			PF3D7_0308200	TCP-1/cpn60 chaperonin family, putative	chaperone	0	0	0	na	ATP binding, unfolded protein binding	protein folding	null

PBANKA_040770	60S acidic ribosomal protein P2, putative			PF3D7_0309600	60S acidic ribosomal protein P2, putative	ribosome	0	0	0	KO not successful	structural constituent of ribosome	translational elongation	intracellular, ribosome
PBANKA_040930	phosphatidylinositol 3- and 4-kinase, putative			PF3D7_0311300	phosphatidylinositol 3- and 4-kinase, putative	inositol phosphate metabolism	0	0	0	na	phosphotransferase activity, alcohol group as acceptor	null	null
PBANKA_040940	protein kinase, putative (PKRP)			PF3D7_0311400	protein kinase, putative	kinase	0	0	0	different in fertilization, ookinete, oocyst, sporozoite and liver stage	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_041000	conserved Plasmodium protein, unknown function			PF3D7_0312000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_041130	conserved Plasmodium protein, unknown function			PF3D7_0313600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_041310	conserved Plasmodium protein, unknown function					RNA	0	0	0	na	null	microtubule cytoskeleton organization	microtubule organizing center, spindle pole
PBANKA_041460	40S ribosomal protein S15A, putative			PF3D7_0316800	40S ribosomal protein S15A, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_041480	arginase			PF3D7_0906500	arginase	AA metabolism	0	0	0	na	arginase activity, metal ion binding	arginine metabolic process	null
PBANKA_041660	replication protein A1, small fragment			PF3D7_0904800	replication protein A1, small fragment	DNA repair	0	0	0	na	nucleic acid binding	null	null
PBANKA_041740	GTPase activating protein, putative	-1.86	0.73	PF3D7_0904000	GTPase activator, putative	trafficking	0	0	0	na	Rab GTPase activator activity	regulation of Rab GTPase activity	intracellular
PBANKA_041750	60S ribosomal protein L32, putative			PF3D7_0903900	60S ribosomal protein L32, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_041770	alpha tubulin 1			PF3D7_0903700	alpha tubulin 1	gliding motility	0	0	0	KO not successful	GTP binding, GTPase activity, structural molecule activity	microtubule-based movement, protein polymerization	microtubule, protein complex
PBANKA_050070	Pb-fam-1 protein					Pb-fam-1 protein	0	0	0	na	null	null	null
PBANKA_050110	early transcribed membrane protein (SEP3)					early transcribed membrane protein (ETRAMP)	0	0	0	KO not successful, (tagged) fertilization, ookinete and oocyst	null	null	null
PBANKA_050170	phosphomannomutase, putative			PF3D7_1017400	phosphomannomutase, putative	mannose metabolism	0	0	0	na	phosphomannomutase activity	mannose biosynthetic process	cytoplasm
PBANKA_050250	serine/threonine protein phosphatase, putative	-3.02	0.74	PF3D7_1018200	serine/threonine protein phosphatase, putative	phosphatase	0	0	0	na	hydrolase activity	null	null
PBANKA_050280	conserved Plasmodium protein, unknown function			PF3D7_1018600	conserved Plasmodium protein, unknown function	translation	0	0	0	na	null	null	null
PBANKA_050350	conserved Plasmodium protein, unknown function	-2.08	0.71	PF3D7_1019300	zinc finger protein, putative	nucleic acid binding	0	0	0	na	nucleic acid binding, zinc ion binding	null	null
PBANKA_050360	60S ribosomal protein L30e, putative			PF3D7_1019400	60S ribosomal protein L30e, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_050440	conserved Plasmodium protein, unknown function			PF3D7_1020200	kinesin, putative	dynein/kinesin	0	0	0	na	null	null	null
PBANKA_050510	ADP-ribosylation factor, putative (ARF1)			PF3D7_1020900	ADP-ribosylation factor (ARF1)	trafficking	0	0	0	na	GTP binding	intracellular protein transport, small GTPase mediated signal transduction	intracellular
PBANKA_050540	conserved Plasmodium protein, unknown function			PF3D7_1021200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_050580	deoxyribose-phosphate aldolase, putative			PF3D7_1021600	deoxyribose-phosphate aldolase, putative	gliding motility	0	0	0	na	deoxyribose-phosphate aldolase activity	deoxyribonucleotide catabolic process	cytoplasm
PBANKA_050630	conserved Plasmodium protein, unknown function			PF3D7_1022100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_050660	pre-mRNA splicing factor, putative	-2.25	0.75	PF3D7_1022400	pre-mRNA splicing factor, putative	mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_050670	citrate synthase, mitochondrial precursor, putative			PF3D7_1022500	citrate synthase, mitochondrial precursor, putative	TCA	0	0	0	(tagged) different in oocyst and liver stage	transferase activity, transferring acyl groups, acyl groups converted into alkyl on transfer	cellular carbohydrate metabolic process	null
PBANKA_050810	chromodomain-helicase-DNA-binding protein 1, putative (CHD1)			PF3D7_1023900	chromodomain-helicase-DNA-binding protein 1 homolog, putative (CHD1)	chromatin	0	0	0	KO not successful	ATP binding, DNA binding, chromatin binding, helicase activity	chromatin assembly or disassembly	chromatin, nucleus
PBANKA_050860	conserved Plasmodium protein, unknown function			PF3D7_1024400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_050920	formin 2, putative			PF3D7_1025000	formin 2, putative	gliding motility	0	0	0	na	null	null	null
PBANKA_050930	glucosamine--fructose-6-phosphate aminotransferase, putative			PF3D7_1025100	glucosamine-fructose-6-phosphate aminotransferase, putative	chitin precursor	0	0	0	na	carbohydrate binding	carbohydrate metabolic process	null
PBANKA_051010	conserved Plasmodium protein, unknown function			PF3D7_1025900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null

PBANKA_051020	conserved Plasmodium protein, unknown function			PF3D7_1026000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_051060	conserved Plasmodium protein, unknown function			PF3D7_1026400	CDH1, WD-repeat protein, putative	kinetochore	0	0	0	different in fertilization and ookinete	null	cytokinesis	nucleus
PBANKA_051080	conserved Plasmodium protein, unknown function			none		unknown function	0	0	0	na	null	null	null
PBANKA_051090	40S ribosomal protein S2B, putative			PF3D7_1026800	40S ribosomal protein S2B, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome, small ribosomal subunit
PBANKA_051120	u3 small nucleolar ribonucleoprotein protein mpp10, putative (MPP10)			PF3D7_1027100	small subunit rRNA processing stabilizing factor, putative	RNA	0	0	0	na	null	null	null
PBANKA_051180	centrin-3, putative			PF3D7_1027700.2	centrin-3	chromatin	0	0	0	na	calcium ion binding	null	null
PBANKA_051190	60S ribosomal protein L3, putative			PF3D7_1027800	60S ribosomal protein L3, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_051270	conserved Plasmodium protein, unknown function			PF3D7_1028600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_051280	merozoite TRAP-like protein, putative (MTRAP)			PF3D7_1028700	merozoite TRAP-like protein (MTRAP)	contaminant	0	0	0	na	null	null	null
PBANKA_051430	conserved Plasmodium protein, unknown function	-1.9	0.73	PF3D7_1030300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_051540	conserved Plasmodium protein, unknown function			PF3D7_1031600	conserved Plasmodium protein, unknown function (GEXP15)	unknown function	0	0	0	na	null	null	null
PBANKA_051630	DER1-like protein, putative			PF3D7_1032500	DER1-like protein, putative (Der1-2)	proteasome	0	0	0	na	null	null	null
PBANKA_051660	leucine-rich repeat protein (LRR1)			PF3D7_1032800	leucine-rich repeat protein (LRR1)	signal transduction	0	0	0	na	protein binding	null	null
PBANKA_051690	S-adenosylmethionine decarboxylase, putative			PF3D7_1033100	S-adenosylmethionine decarboxylase/ornithine decarboxylase (Ad&MetDCOCC)	polyamine biosynthesis	0	0	0	na	adenosylmethionine decarboxylase activity	spermidine biosynthetic process, spermine biosynthetic process	null
PBANKA_051700	early transcribed membrane protein (ETRAMP)					early transcribed membrane protein (ETRAMP)	0	0	0	na	null	null	null
PBANKA_051740	myb2 transcription factor, putative (Myb2)			PF3D7_1033600	myb2 transcription factor, putative (Myb2)	transcription	0	0	0	na	DNA binding	null	null
PBANKA_051750	bromodomain protein, putative			PF3D7_1033700	bromodomain protein, putative	chromatin	0	0	0	na	null	null	nucleus
PBANKA_051820	flavoprotein subunit of succinate dehydrogenase, putative			PF3D7_1034400	flavoprotein subunit of succinate dehydrogenase (SDHA)	TCA, redoxmeth	0	0	0	different in fertilization, ookinete and oocyst	electron carrier activity, flavin adenine dinucleotide binding, oxidoreductase activity, acting on the CH-CH group of donors	electron transport chain, oxidation-reduction process, tricarboxylic acid cycle	null
PBANKA_051900	S-antigen, putative					unknown function	0	0	0	na	null	null	null
PBANKA_051960	conserved Plasmodium protein, unknown function					unknown function	0	0	0	na	null	null	null
PBANKA_052020	ADP/ATP transporter on adenylate translocase, putative			PF3D7_1037300	ADP/ATP transporter on adenylate translocase	transporter	0	0	0	na	binding, transporter activity	transport	mitochondrial inner membrane
PBANKA_052120	conserved Plasmodium protein, unknown function			PF3D7_1038300	conserved Plasmodium protein, unknown function	RNA	0	0	0	na	null	null	null
PBANKA_052210	conserved Plasmodium protein, unknown function			PF3D7_0421700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_052270	alpha tubulin 2			PF3D7_0422300	alpha tubulin 2	gliding motility	0	0	0	na	GTP binding, GTPase activity, structural molecule activity	microtubule-based movement, protein polymerization	microtubule, protein complex
PBANKA_052360	BSD-domain protein, putative			PF3D7_0423200	BSD domain, putative	transcription	0	0	0	na	null	null	null
PBANKA_052430	tryptophan/threonine-rich antigen, putative					unknown function	0	0	0	na	null	null	null
PBANKA_060060	NIMA related kinase 3, putative (NEK3)			PF3D7_1201600	NIMA related kinase 3 (NEK3)	kinase	0	0	0	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_060090	conserved Plasmodium protein, unknown function			PF3D7_1201900	conserved protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_060160	conserved protein, unknown function			PF3D7_1202600	conserved protein, unknown function	transcription	0	0	0	na	null	null	null
PBANKA_060190	high mobility group protein, putative (HMGB1)			PF3D7_1202900	high mobility group protein (HMGB1)	chromatin	0	0	0	KO not successful; (mutated) sporozoite and liver stage	DNA binding	null	nucleus
PBANKA_060430	conserved Plasmodium protein, unknown function			PF3D7_1205600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null

PBANKA_060510	Tat binding protein 1(TBP-1)-interacting protein, putative			PF3D7_1206500	Tat binding protein 1(TBP-1)-interacting protein, putative	proteasome	0	0	0	na	null	null	null
PBANKA_060530	eukaryotic translation initiation factor 5, putative			PF3D7_1206700	eukaryotic translation initiation factor 5, putative	translation	0	0	0	na	translation initiation factor activity	translational initiation	null
PBANKA_060560	conserved Plasmodium protein, unknown function	1.24	0.75	PF3D7_1207000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_060630	conserved Plasmodium protein, unknown function			PF3D7_1207800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_060810	conserved Plasmodium protein, unknown function			PF3D7_1209700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_060950	kinesin-7, putative			PF3D7_1211000	kinesin-like protein, putative	dynein/kinesin	0	0	0	na	ATP binding, microtubule motor activity	microtubule-based movement	null
PBANKA_060990	heat shock protein DNAJ homologue Pfj4, putative			PF3D7_1211400	heat shock protein DNAJ homologue Pfj4 (PflJ4)	chaperone	0	0	0	na	heat shock protein binding	null	null
PBANKA_061020	minichromosome maintenance (MCM) complex subunit, putative (MCM5)			PF3D7_1211700	minichromosome maintenance (MCM) complex subunit, putative (MCM5)	DNA replication	0	0	0	na	ATP binding, DNA binding	DNA replication	null
PBANKA_061070	conserved Plasmodium protein, unknown function					unknown function	0	0	0	na	null	null	null
PBANKA_061180	N-acetyltransferase, putative			PF3D7_1437000	N-acetyltransferase, putative	chromatin modifying proteins	0	0	0	na	N-acetyltransferase activity	metabolic process	null
PBANKA_061520	calcium dependent protein kinase 4 (CDPK4)			PF3D7_0717500	calcium dependent protein kinase 4 (CDPK4)	kinase	0	0	0	different in fertilization, ookinete and oocyst	ATP binding, calcium ion binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_061550	conserved Plasmodium protein, unknown function			PF3D7_0717800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_061670	NIMA related kinase 4 (NEK4)			PF3D7_0719200	NIMA related kinase 4 (NEK4)	kinase	0	0	0	different in fertilization and ookinete	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_061710	60S ribosomal protein L11a, putative			PF3D7_0719600	60S ribosomal protein L11a, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_061720	40S ribosomal protein S10, putative			PF3D7_0719700	40S ribosomal protein S10, putative	ribosome	0	0	0	na	null	null	null
PBANKA_061840	conserved Plasmodium protein, unknown function			PF3D7_0720900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_061910	40S ribosomal protein S5, putative			PF3D7_0721600	40S ribosomal protein S5, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome, small ribosomal subunit
PBANKA_061920	secreted ookinete protein, putative (PSOP1)			PF3D7_0721700	secreted ookinete protein, putative (PSOP1)	adhesin	0	0	0	not different from wild type	null	null	null
PBANKA_061930	conserved Plasmodium protein, unknown function			PF3D7_0721800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_062000	cell cycle control protein cwf15, putative			PF3D7_0722500	cell cycle control protein cwf15, putative	mRNA	0	0	0	na	null	nuclear mRNA splicing, via spliceosome	spliceosomal complex
PBANKA_062050	tRNAHis guanylyltransferase, putative			PF3D7_0723000	tRNAHis guanylyltransferase, putative	translation	0	0	0	na	null	null	null
PBANKA_062090	conserved Plasmodium protein, unknown function	-1.81	0.73	PF3D7_0723400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_062190	mitochondrial import inner membrane translocase subunit tim14, putative			PF3D7_0724400	mitochondrial import inner membrane translocase subunit tim14, putative	transporter	0	0	0	na	heat shock protein binding	null	null
PBANKA_062240	kinesin-19, putative	-4.93	0.75	PF3D7_0724900	kinesin-like protein, putative	dynein/kinesin	0	0	0	na	ATP binding, microtubule motor activity	microtubule-based movement	null
PBANKA_062280	conserved Plasmodium protein, unknown function			PF3D7_0725300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_062300	Plasmodium exported protein, unknown function					unknown function	0	0	0	na	null	null	null
PBANKA_062310	conserved rodent malaria protein, unknown function					unknown function	0	0	0	KO not successful	null	null	null
PBANKA_062330	tryptophan-rich antigen, putative						0	0	0	na	null	null	null
PBANKA_070020	BIR protein					BIR protein	0	0	0	na	null	null	null
PBANKA_070110	conserved Plasmodium protein, unknown function					unknown function	0	0	0	na	null	null	null
PBANKA_070160	conserved protein, unknown function			PF3D7_0829100	conserved protein, unknown function	unknown function	0	0	0	na	null	null	null

PBANKA_070200	conserved Plasmodium protein, unknown function		PF3D7_0828700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_070280	protein disulfide isomerase		PF3D7_0827900	protein disulfide isomerase (PDI8)	proteasome	0	0	0	na	isomerase activity	cell redox homeostasis	endoplasmic reticulum
PBANKA_070350	conserved Plasmodium protein, unknown function	-2.88	0.75	PF3D7_0827200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null
PBANKA_070430	SPRY domain, putative		PF3D7_0826300	SPRY domain, putative	protein-protein interaction	0	0	0	na	null	null	null
PBANKA_070470	conserved Plasmodium protein, unknown function		PF3D7_0825900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_070540	translation initiation factor IF-3, putative		PF3D7_0825200	translation initiation factor IF-3, putative	translation	0	0	0	na	translation initiation factor activity	translational initiation	null
PBANKA_070550	conserved Plasmodium protein, unknown function		PF3D7_0825100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_070560	conserved Plasmodium protein, unknown function	-4.04	0.75	PF3D7_0825000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null
PBANKA_070690	conserved Plasmodium protein, unknown function		PF3D7_0823700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_071010	2-oxoglutarate dehydrogenase e1, putative		PF3D7_0820700	2-oxoglutarate dehydrogenase E1 component	TCA	0	0	0	na	oxoglutarate dehydrogenase (succinyl-transferring) activity, thiamine pyrophosphate binding	glycolysis	null
PBANKA_071120	conserved Plasmodium protein, unknown function		PF3D7_0819600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_071190	heat shock protein, putative (HSP70)		PF3D7_0818900	heat shock protein 70 (Hsp70)	transporter	0	0	0	na	ATP binding	null	null
PBANKA_071230	zinc finger protein, putative		PF3D7_0818500	zinc finger protein, putative	proteasome	0	0	0	na	DNA binding, zinc ion binding	null	null
PBANKA_071260	14-3-3 protein, putative		PF3D7_0818200	14-3-3 protein, putative		0	0	0	na	protein domain specific binding	null	cytoplasm, nucleus
PBANKA_071440	conserved Plasmodium protein, unknown function		PF3D7_0816400	conserved Plasmodium protein, unknown function	kinase	0	0	0	na	calcium ion binding	null	null
PBANKA_071550	phosphoglucomutase-2 (PGM2)		PF3D7_0413500	phosphoglucomutase-2 (PGM2)	glycolysis	0	0	0	KO not successful; (tagged) fertilization and ookinete	null	null	cytoplasm
PBANKA_071560	26S proteasome AAA-ATPase subunit RPT3, putative		PF3D7_0413600	26S proteasome AAA-ATPase subunit RPT3, putative	proteasome	0	0	0	na	ATP binding, nucleoside-triphosphatase activity	protein catabolic process	cytoplasm, nucleus
PBANKA_071570	lysine decarboxylase-like protein, putative		PF3D7_0413700	lysine decarboxylase-like protein, putative	AA metabolism	0	0	0	na	null	null	null
PBANKA_071600	chromosome associated protein, putative		PF3D7_0414000	chromosome associated protein, putative	chromatin	0	0	0	na	ATP binding, protein binding	chromosome organization	chromosome
PBANKA_071660	conserved Plasmodium protein, unknown function		PF3D7_0414600	conserved protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_071780	60S ribosomal protein L15, putative		PF3D7_0415900	60S ribosomal protein L15, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_071970	conserved Plasmodium protein, unknown function		PF3D7_0417600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_072040	conserved Plasmodium protein, unknown function		PF3D7_0418300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_072130	CGI-141 protein homolog, putative		PF3D7_0419200	CGI-141 protein homolog, putative	trafficking	0	0	0	na	null	vesicle-mediated transport	null
PBANKA_072170	ran binding protein 1, putative		PF3D7_0419600	ran binding protein 1, putative	mRNA	0	0	0	na	null	intracellular transport	null
PBANKA_080180	conserved Plasmodium protein, unknown function		PF3D7_0704100	conserved Plasmodium membrane protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_080230	e3 ubiquitin-protein ligase, putative		PF3D7_0704600	ubiquitin transferase, putative	proteasome	0	0	0	na	acid-amino acid ligase activity	cellular protein modification process	intracellular
PBANKA_080310	minichromosome maintenance (MCM) complex subunit, putative (MCM7)		PF3D7_0705400	minichromosome maintenance (MCM) complex subunit, putative (MCM7)	DNA replication	0	0	0	na	ATP binding, DNA binding, nucleoside-triphosphatase activity	DNA replication, DNA-dependent DNA replication initiation	nucleus
PBANKA_080340	40S ribosomal protein S29, putative		PF3D7_0705700	40S ribosomal protein S29, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_080400	ribosomal protein, L37e, putative		PF3D7_0706400	ribosomal protein, L37e, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_080410	conserved Plasmodium protein, unknown function		PF3D7_0706500	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null

PBANKA_080570	heat shock protein 90, putative (HSP90)	PF3D7_0708400	heat shock protein 90 (HSP90)	chaperone	0	0	0	na	ATP binding, unfolded protein binding	protein folding, response to stress	null
PBANKA_080590	kinesin, putative	PF3D7_0319400	kinesin, putative	dynein/kinesin	0	0	0	na	ATP binding, microtubule motor activity	microtubule-based movement	null
PBANKA_080680	conserved Plasmodium protein, unknown function	PF3D7_0318400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_080700	dna-directed rna polymerase ii subunit rpb1, putative (RPB1)	PF3D7_0318200	DNA-directed RNA polymerase II, putative	transcription	0	0	0	na	DNA binding, DNA-directed RNA polymerase activity	transcription from RNA polymerase II promoter	DNA-directed RNA polymerase II, core complex
PBANKA_080760	40S ribosomal protein S11, putative	PF3D7_0317600	40S ribosomal protein S11, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_080990	tRNA pseudouridine synthase, putative	PF3D7_0908700	tRNA pseudouridine synthase, putative	translation	0	0	0	na	RNA binding, pseudouridine synthase activity	pseudouridine synthesis	null
PBANKA_081050	apoptosis-related protein, putative	PF3D7_0909300	apoptosis-related protein, putative (ARP)	apoptosis	0	0	0	na	DNA binding	null	null
PBANKA_081300	inhibitor of cysteine proteases (ICP)	PF3D7_0911900	falstatin (ICP)	protease	0	0	0	KO not successful	null	null	null
PBANKA_081340	conserved Plasmodium protein, unknown function	PF3D7_0912400	conserved Plasmodium protein, unknown function	Ca2+ binding	0	0	0	na	null	null	null
PBANKA_081350	conserved Plasmodium protein, unknown function	PF3D7_0912500	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	nucleic acid binding	null	nucleus
PBANKA_081480	conserved Plasmodium protein, unknown function	PF3D7_0913800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_081690	conserved Plasmodium protein, unknown function	PF3D7_0915900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_081700	sugar transporter, putative	PF3D7_0916000	sugar transporter, putative	transporter	0	0	0	na	null	null	null
PBANKA_081890	heat shock protein 70, putative	PF3D7_0917900	heat shock protein 70 (Hsp70-2)	chaperone	0	0	0	na	ATP binding	null	null
PBANKA_081990	nucleosome assembly protein (NAPS)	PF3D7_0919000	nucleosome assembly protein (NAPS)	chromatin	0	0	0	KO not successful; (tagged) different in fertilization, ookinete and oocyst	null	nucleosome assembly	nuclear periphery, nucleus
PBANKA_082110	CS domain protein, putative	PF3D7_0920200	CS-domain containing protein, conserved in Apicomplexa	adhesin	0	0	0	na	null	null	null
PBANKA_082170	inosine-5'-monophosphate dehydrogenase, putative	PF3D7_0920800	inosine-5'-monophosphate dehydrogenase	purine metabolism	0	0	0	na	IMP dehydrogenase activity	oxidation-reduction process	null
PBANKA_082200	conserved Plasmodium protein, unknown function	PF3D7_0921100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_082360	pre-mRNA splicing factor, putative	PF3D7_0922700	pre-mRNA splicing factor, putative	mRNA	0	0	0	na	null	RNA splicing	spliceosomal complex
PBANKA_082480	RNA-binding protein, putative	PF3D7_0923900	RNA binding protein, putative	mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_082560	splicing factor 3A subunit 3, putative (SF3A3)	PF3D7_0924700	splicing factor 3A subunit 3, putative (SF3A3)	mRNA	0	0	0	na	nucleic acid binding, zinc ion binding	null	nucleus
PBANKA_082580	conserved Plasmodium protein, unknown function	PF3D7_0925000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_082640	zinc-binding protein (Yippee), putative	PF3D7_0925600	zinc binding protein (Yippee), putative	senescence, apoptosis	0	0	0	na	null	null	null
PBANKA_082670	conserved Plasmodium protein, unknown function	PF3D7_0925900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_082830	dynein light chain, putative	PF3D7_0927500	dynein light chain, putative	dynein/kinesin	0	0	0	na	null	null	null
PBANKA_082890	conserved Plasmodium protein, unknown function	PF3D7_0928100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_083030	conserved Plasmodium protein, unknown function	PF3D7_0929500	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_083100	merozoite surface protein 1 (MSP1)	PF3D7_0930300	merozoite surface protein 1 (MSP1)	contaminant	0	0	0	KO not successful; (mutated) different in sporozoite and liver stage	null	pathogenesis	membrane
PBANKA_083170	NifU-like protein, putative	PF3D7_0930900	NifU-like protein, putative	apicoplast	0	0	0	na	iron ion binding, iron-sulfur cluster binding	iron-sulfur cluster assembly	null
PBANKA_083260	proteasome subunit beta type-6, putative	PF3D7_0931800	proteasome precursor, putative	proteasome	0	0	0	na	threonine-type endopeptidase activity	proteolysis involved in cellular protein catabolic process	proteasome core complex
PBANKA_083310	aspartyl aminopeptidase, putative	PF3D7_0932300	M18 aspartyl aminopeptidase (M18AAP)	protease	0	0	0	na	aminopeptidase activity, zinc ion binding	proteolysis	vacuole

PBANKA_083520	transcription factor with AP2 domain(s), putative		PF3D7_0934400	transcription factor with AP2 domain(s), putative (ApiAP2)	transcription	0	0	0	na	sequence-specific DNA binding transcription factor activity	regulation of transcription, DNA-dependent	null	
PBANKA_083700	BIR protein				BIR protein	0	0	0	na	null	null	null	
PBANKA_090140	mitochondrial ATP synthase delta subunit, putative		PF3D7_1147700	mitochondrial ATP synthase delta subunit, putative	ATP synthase complex	0	0	0	na	hydrogen ion transporting ATP synthase activity, rotational mechanism, proton-transporting ATPase activity, rotational mechanism	ATP synthesis coupled proton transport	mitochondrion, proton-transporting ATP synthase complex, catalytic core F(1)	
PBANKA_090190	tubulin-tyrosine ligase, putative	-3.79	0.75	PF3D7_1147200	tubulin-tyrosine ligase, putative	microtubule	0	0	0	na	tubulin-tyrosine ligase activity	cellular protein modification process	null
PBANKA_090260	CCAAT-box DNA binding protein subunit B, putative			PF3D7_1146600	CCAAT-box DNA binding protein subunit B	chromatin	0	0	0	na	sequence-specific DNA binding	null	intracellular, nucleus
PBANKA_090370	conserved Plasmodium protein, unknown function			PF3D7_1145300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_090420	conserved Plasmodium protein, unknown function	-3.03	0.75	PF3D7_1144800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_090460	conserved Plasmodium protein, unknown function			PF3D7_1144400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_090470	60S ribosomal protein L41, putative			PF3D7_1144300	60S ribosomal protein L41, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	ribosome
PBANKA_090500	40S ribosomal protein S21e, putative			PF3D7_1144000	40S ribosomal protein S21e, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_090560	translation initiation factor eIF-1A, putative			PF3D7_1143400	translation initiation factor eIF-1A, putative	translation	0	0	0	na	RNA binding, translation initiation factor activity	translational initiation	null
PBANKA_090730	conserved Plasmodium protein, unknown function			PF3D7_1141700	conserved Plasmodium protein, unknown function	protease	0	0	0	na	null	null	null
PBANKA_090790	conserved Plasmodium protein, unknown function	-6.19	0.75			unknown function	0	0	0	na	null	null	null
PBANKA_090870	conserved Plasmodium protein, unknown function			PF3D7_1140300	P-loop containing nucleoside triphosphate hydrolase, putative	purine metabolism	0	0	0	na	null	null	null
PBANKA_090880	conserved Plasmodium protein, unknown function			PF3D7_1140200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_090980	conserved Plasmodium protein, unknown function			PF3D7_1139100	conserved Plasmodium protein, unknown function	RNA binding	0	0	0	na	nucleic acid binding	null	null
PBANKA_091020	protein phosphatase 2C, putative			PF3D7_1138500	protein phosphatase 2c	phosphatase	0	0	0	na	catalytic activity	null	null
PBANKA_091090	conserved Plasmodium protein, unknown function			PF3D7_1137800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_091170	subtilisin-like protease 2 (SUB2)			PF3D7_1136900	subtilisin-like protease 2 (SUB2)	protease	0	0	0	KO not successful	serine-type endopeptidase activity	proteolysis	null
PBANKA_091200	conserved Plasmodium protein, unknown function			PF3D7_1136600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_091250	conserved Plasmodium protein, unknown function	-3.34	0.75	PF3D7_1136100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_091260	conserved Plasmodium protein, unknown function			PF3D7_1107300	polyadenylate-binding protein-interacting protein 1, putative (PAIP1)	mRNA	0	0	0	na	null	null	null
PBANKA_091440	heat shock protein hsp70 homologue, putative (UIS24)			PF3D7_1134000	heat shock protein 70 (Hsp70-3)	transporter	0	0	0	na	ATP binding, unfolded protein binding	protein folding	null
PBANKA_091500	apical membrane antigen 1 (AMA1)			PF3D7_1133400	apical membrane antigen 1 (AMA1)	contaminant	0	0	0	KO not successful; (mutated) sporozoite and liver stage	null	pathogenesis	membrane
PBANKA_091540	conserved Plasmodium protein, unknown function			PF3D7_1133000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_091560	aquaglyceroporin (AQP)			PF3D7_1132800	aquaglyceroporin (AQP)	glycolysis	0	0	0	not different from wild type	transporter activity	transport	membrane, perinuclear region of cytoplasm
PBANKA_091720	RNA-binding protein s1, putative	-1.7	0.7			mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_091800	60S ribosomal protein P0			PF3D7_1130200	60S ribosomal protein P0	ribosome	0	0	0	na	structural constituent of ribosome	ribosome biogenesis, translational elongation	intracellular, ribosome
PBANKA_091830	transporter, putative			PF3D7_1129900	transporter, putative	transporter	0	0	0	na	null	null	null
PBANKA_091860	phosphatidylinositol-4-phosphate 5-kinase, putative			PF3D7_1129600	phosphatidylinositol-4-phosphate-5-kinase, putative	inositol phosphate metabolism	0	0	0	na	null	null	null
PBANKA_091910	parasitophorous vacuolar protein 1, putative (PV1)			PF3D7_1129100	parasitophorous vacuolar protein 1 (PV1)	PV membrane protein	0	0	0	na	null	null	null

PBANKA_092080	CRAL/TRIO domain-containing protein, putative	PF3D7_1127600	CRAL/TRIO domain-containing protein, putative	trafficking	0	0	0	na	null	null	null
PBANKA_092170	conserved Plasmodium protein, unknown function	PF3D7_1126700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_092280	small nuclear ribonucleoprotein D1, putative (SNRPD1)	PF3D7_1125500	small nuclear ribonucleoprotein D1, putative (SNRPD1)	mRNA	0	0	0	na	null	null	null
PBANKA_092340	60S ribosomal protein L35, putative	PF3D7_1124900	60S ribosomal protein L35, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_092490	translation elongation factor EF-1, subunit alpha, putative	PF3D7_1123400	translation elongation factor EF-1, subunit alpha, putative	translation	0	0	0	na	GTP binding, GTPase activity	null	null
PBANKA_092550	calcium dependent protein kinase 6 (CDPK6)	PF3D7_1122800	calcium dependent protein kinase 6 (CDPK6)	kinase	0	0	0	different in sporozoite and liver stage	ATP binding, calcium ion binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_092670	circumsporozoite-related antigen	PF3D7_1121600	circumsporozoite-related antigen (CRA)	adhesin	0	0	0	different in liver stage	null	null	null
PBANKA_092750	conserved Plasmodium protein, unknown function	PF3D7_1120800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_092800	conserved Plasmodium protein, unknown function	PF3D7_1120200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_092810	phosphoglycerate mutase, putative (PGM1)	PF3D7_1120100	phosphoglycerate mutase, putative (PGM1)	glycolysis	0	0	0	na	intramolecular transferase activity, phosphotransferases	glycolysis	null
PBANKA_092920	conserved Plasmodium protein, unknown function	PF3D7_1118900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_093090	deubiquinating/deneddylating enzyme, putative (UCH54)	PF3D7_1117100	deubiquinating/deneddylating enzyme (UCH54)	proteasome	0	0	0	na	ubiquitin thiolesterase activity	ubiquitin-dependent protein catabolic process	intracellular
PBANKA_093120	heat shock protein 101 (ClpB2)	PF3D7_1116800	heat shock protein 101 (HSP101)	chaperone	0	0	0	KO not successful, (tagged) different in sporozoite and liver stage	ATP binding, nucleoside-triphosphatase activity, protein binding	protein metabolic process	null
PBANKA_093130	dipeptidyl aminopeptidase, putative	PF3D7_1116700	cathepsin C, homolog,dipeptidyl peptidase 1 (DPAP1)	protease	0	0	0	na	cysteine-type peptidase activity	proteolysis	null
PBANKA_093210	conserved Plasmodium protein, unknown function	PF3D7_1115900	conserved Plasmodium membrane protein, unknown function	unknown function	0	0	0	na	zinc ion binding	null	null
PBANKA_093300	serine/threonine protein kinase, putative	PF3D7_1114700	serine/threonine protein kinase, putative (CLK3) (PRK4)	kinase	0	0	0	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_093390	glyoxalase I, putative	PF3D7_1147100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_093720	asparagine-rich antigen, putative	PF3D7_1111600	endonuclease/exonuclease/phosphatase family protein, putative	inositol phosphate metabolism	0	0	0	na	nucleic acid binding	null	null
PBANKA_093730	conserved Plasmodium protein, unknown function	PF3D7_1110400	asparagine-rich antigen	unknown function	0	0	0	na	nucleic acid binding	null	intracellular
PBANKA_093770	apicoplast ribosomal protein L36e precursor, putative	PF3D7_1109900	apicoplast ribosomal protein L36e precursor, putative	ribosome apico	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_093840	endoplasmic reticulum-resident calcium binding protein, putative	PF3D7_1108600	endoplasmic reticulum-resident calcium binding protein (ERC)	HG ERG	0	0	0	na	calcium ion binding	null	null
PBANKA_093880	conserved Plasmodium protein, unknown function	PF3D7_1108100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_094080	apicoplast ribosomal protein S15 precursor, putative	PF3D7_1106100	apicoplast ribosomal protein S15 precursor, putative	ribosome apico	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_094110	conserved Plasmodium protein, unknown function	PF3D7_1105800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_094190	histone H4, putative	PF3D7_1105000	histone H4 (H4)	chromatin	0	0	0	na	DNA binding	DNA-dependent transcription, initiation, nucleosome assembly	nucleosome, nucleus
PBANKA_094250	conserved Plasmodium protein, unknown function	PF3D7_1104400	conserved protein, unknown function	nucleic acid binding	0	0	0	na	null	null	null
PBANKA_094270	chromatin remodeling protein, putative (SNF2L)	PF3D7_1104200	chromatin remodeling protein (SNF2L)	chromatin	0	0	0	na	ATP binding, DNA binding, helicase activity	null	null
PBANKA_094360	60S acidic ribosomal protein, putative	PF3D7_1103100	60S ribosomal protein P1, putative	ribosome	0	0	0	na	structural constituent of ribosome	translational elongation	intracellular, ribosome
PBANKA_100060	erythrocyte membrane antigen 1	PF3D7_0403700	CGI-201 protein, short form	mRNA	0	0	0	na	null	null	null
PBANKA_100140	splicing factor, putative	PF3D7_0403800	conserved Plasmodium protein, unknown function	mRNA	0	0	0	na	null	RNA processing	intracellular
PBANKA_100150	conserved Plasmodium protein, unknown function	PF3D7_0404000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null

PBANKA_102470	ubiquitin fusion degradation protein UFD1, putative	PF3D7_1418000	ubiquitin fusion degradation protein UFD1, putative (UFD1)	proteasome	0	0	0	na	null	ubiquitin-dependent protein catabolic process	null
PBANKA_102490	minichromosome maintenance (MCM) complex subunit, putative (MCM2)	PF3D7_1417800	minichromosome maintenance (MCM) complex subunit (MCM2)	DNA replication	0	0	0	na	ATP binding, DNA binding, nucleoside-triphosphatase activity	DNA replication, DNA-dependent DNA replication initiation	nucleus
PBANKA_102550	NOT family protein, putative	PF3D7_1417200	NOT family protein, putative	mRNA	0	0	0	na	null	null	null
PBANKA_102830	serine/threonine protein phosphatase, putative	PF3D7_1414400	serine/threonine protein phosphatase (PP1)	phosphatase	0	0	0	na	hydrolase activity	null	null
PBANKA_102840	60S ribosomal protein L10, putative	PF3D7_1414300	60S ribosomal protein L10, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_102940	conserved Plasmodium protein, unknown function	PF3D7_1413200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_103010	actin II	PF3D7_1412500	actin II (ACT2)	gliding motility	0	0	0	different in fertilization, ookinete, oocyst and sporozoite	protein binding	null	cytoplasm
PBANKA_103060	conserved Plasmodium protein, unknown function	PF3D7_1412000	p1/s1 nuclease, putative	DNA repair	0	0	0	na	hydrolase activity, acting on ester bonds	null	null
PBANKA_103160	conserved Plasmodium protein, unknown function	PF3D7_1410900	conserved Plasmodium protein, unknown function	transcription	0	0	0	na	null	null	null
PBANKA_103310	conserved Plasmodium protein, unknown function	PF3D7_1409200.1	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_103370	conserved Plasmodium protein, unknown function	PF3D7_1408800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_103390	40S ribosomal protein S8e, putative	PF3D7_1408600	40S ribosomal protein S8e, putative	ribosome	0	0	0	na	null	null	intracellular
PBANKA_103430	transcription factor with AP2 domain(s) (API2-G2)	PF3D7_1408200	transcription factor with AP2 domain(s) (ApiAP2)	transcription	0	0	0	different in fertilization and ookinete	sequence-specific DNA binding transcription factor activity	regulation of transcription, DNA-dependent	null
PBANKA_103440	plasmepsin IV (PM4)	PF3D7_1407800	plasmepsin IV (PM4)	plasmepsin, protease	0	0	0	na	aspartic-type endopeptidase activity	proteolysis	null
PBANKA_103490	pre-mRNA splicing factor, putative	PF3D7_1407300	pre-mRNA splicing factor, putative	mRNA	0	0	0	na	null	null	null
PBANKA_103510	fibrillarin, putative (NOP1)	PF3D7_1407100	fibrillarin, putative (NOP1)	ribosome assembly	0	0	0	na	RNA binding	rRNA processing	nucleus
PBANKA_103520	LCCL domain-containing protein (CCp3)	PF3D7_1407000	LCCL domain-containing protein (CCp3)	adhesin	0	0	0	different in oocyst and sporozoite, (tagged) also in fertilization and ookinete	scavenger receptor activity	null	membrane
PBANKA_103630	RNA-binding protein, putative	PF3D7_1405900	RNA binding protein, putative	mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_103760	rna biogenesis protein rrp5, putative (RRP5)	PF3D7_1404500	U3 small nucleolar ribonucleoprotein, U3 snoRNP, putative	mRNA	0	0	0	na	null	RNA processing	intracellular
PBANKA_103800	cytochrome c, putative	PF3D7_1404100	cytochrome c, putative	redoxmeth	0	0	0	na	electron carrier activity, heme binding, iron ion binding	null	null
PBANKA_103860	conserved Plasmodium protein, unknown function	PF3D7_1403400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_103940	ubiquitin-40s ribosomal protein s27a, putative	PF3D7_1402500	40S ribosomal protein S31/UBI, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_104020	BIR protein			BIR protein	0	0	0	na	null	null	null
PBANKA_110110	Plasmodium exported protein, unknown function			unknown function	0	0	0	na	null	null	null
PBANKA_110130	conserved rodent malaria protein, unknown function			unknown function	0	0	0	na	null	null	null
PBANKA_110230	conserved Plasmodium protein, unknown function	PF3D7_0502600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_110340	60S ribosomal protein L31, putative	PF3D7_0503800	60S ribosomal protein L31, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_110390	conserved Plasmodium protein, unknown function	PF3D7_0504300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_110550	conserved Plasmodium protein, unknown function	PF3D7_0505900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_110670	60S ribosomal protein L4, putative	PF3D7_0507100	60S ribosomal protein L4, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_110680	subtilisin-like protease 3, putative (SUB3)	PF3D7_0507200	subtilisin-like protease 3, putative (SUB3)	protease	0	0	0	na	serine-type endopeptidase activity	proteolysis	null

PBANKA_110710	subtilisin-like protease 1, putative (SUB1)			PF3D7_0507500	subtilisin-like protease 1 (SUB1)	protease	0	0	0	KO not successful, (mutated) different in liver stage	serine-type endopeptidase activity	proteolysis	null
PBANKA_110800	transcription factor IIb, putative			PF3D7_0508400	transcription factor IIb, putative	transcription	0	0	0	na	null	null	null
PBANKA_110820	conserved Plasmodium protein, unknown function			PF3D7_0508600	conserved Plasmodium protein, unknown function	nucleic acid binding	0	0	0	na	null	null	null
PBANKA_110850	conserved Plasmodium protein, unknown function			PF3D7_0508900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_110890	conserved Plasmodium protein, unknown function			PF3D7_0509300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_111040	conserved Plasmodium protein, unknown function			PF3D7_0510800	conserved Plasmodium protein, unknown function	transcription	0	0	0	na	null	null	null
PBANKA_111130	kinase binding protein CGI-121, putative						0	0	0	na	null	null	null
PBANKA_111170	conserved Plasmodium protein, unknown function			PF3D7_0512100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_111230	Rab1b, putative			PF3D7_0512600	Rab GTPase 1b (Rab1b)	trafficking	0	0	0	na	GTP binding, GTPase activity, protein binding	intracellular protein transport, nucleocytoplasmic transport, small GTPase mediated signal transduction	intracellular
PBANKA_111300	purine nucleotide phosphorylase, putative			PF3D7_0513300	purine nucleoside phosphorylase (PNP)	purine metabolism	0	0	0	na	catalytic activity	nucleoside metabolic process	null
PBANKA_111330	deoxyribodipyrimidine photolyase, putative			PF3D7_0513600	deoxyribodipyrimidine photolyase (photosensitizing enzyme, DNA photolyase), putative	DNA replication	0	0	0	na	deoxyribodipyrimidine photo-lyase activity	DNA repair	null
PBANKA_111370	tubulin-tyrosine ligase, putative			PF3D7_0514000	tubulin-tyrosine ligase, putative (TTL)	microtubule	0	0	0	na	tubulin-tyrosine ligase activity	cellular protein modification process	null
PBANKA_111520	conserved Plasmodium protein, unknown function			PF3D7_0515600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_111540	conserved Plasmodium protein, unknown function			PF3D7_0515800	BoIA-like protein, putative	cell division	0	0	0	na	null	null	null
PBANKA_111610	conserved Plasmodium protein, unknown function			PF3D7_0616600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_111740	conserved Plasmodium protein, unknown function			PF3D7_0618200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_111750	ribosomal protein L27a, putative			PF3D7_0618300	60S ribosomal protein L27a, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_111860	cell division cycle protein 48 homologue, putative			PF3D7_0619400	cell division cycle protein 48 homologue, putative	cell division	0	0	0	na	ATP binding, nucleoside-triphosphatase activity	null	null
PBANKA_111920	conserved Plasmodium protein, unknown function	-3.28	0.75	PF3D7_0620000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_111960	merozoite surface protein 10, putative (MSP10)			PF3D7_0620400	merozoite surface protein 10 (MSP10)	contaminant	0	0	0	na	null	null	null
PBANKA_111990	DnaJ protein, putative			PF3D7_0620700	DnaJ protein, putative	chaperone	0	0	0	na	heat shock protein binding	null	null
PBANKA_112100	conserved Plasmodium protein, unknown function			PF3D7_0622100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_112200	coronin binding protein, putative			PF3D7_0623100	coronin binding protein, putative	gliding motility	0	0	0	na	null	null	null
PBANKA_112350	SNF2 helicase, putative (ISWI)			PF3D7_0624600	SNF2 helicase, putative (ISWI)	chromatin	0	0	0	na	ATP binding, DNA binding, helicase activity, protein binding, zinc ion binding	null	nucleus
PBANKA_112380	conserved Plasmodium protein, unknown function			PF3D7_0624900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_112470	conserved Plasmodium protein, unknown function			PF3D7_0625900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_112560	pyruvate kinase, putative			PF3D7_0626800	pyruvate kinase (PyrK)	glycolysis	0	0	0	na	magnesium ion binding, potassium ion binding, pyruvate kinase activity	glycolysis	null
PBANKA_112580	conserved Plasmodium protein, unknown function			PF3D7_0627000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_112700	choline/ethanolaminephosphotransferase (CEPT)			PF3D7_0628300	choline/ethanolaminephosphotransferase, putative (CEPT)	phosphatidylcholine metabolism	0	0	0	KO not successful	phosphotransferase activity, for other substituted phosphate groups	phospholipid biosynthetic process	endoplasmic reticulum, membrane
PBANKA_112780	DnaJ protein, putative			PF3D7_0629200	DnaJ protein, putative	chaperone	0	0	0	na	heat shock protein binding, unfolded protein binding	protein folding	null
PBANKA_112890	conserved Plasmodium protein, unknown function			PF3D7_0630100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null

PBANKA_112910	DNA polymerase epsilon, putative			PF3D7_0630300	DNA polymerase epsilon, catalytic subunit a, putative	DNA repair	0	0	0	na	DNA binding, DNA-directed DNA polymerase activity, nucleotide binding	DNA replication	null
PBANKA_112960	conserved Plasmodium protein, unknown function			PF3D7_0630800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_113050	proteasome subunit alpha type-7, putative			PF3D7_1353900	proteasome subunit, putative	proteasome	0	0	0	na	threonine-type endopeptidase activity	ubiquitin-dependent protein catabolic process	proteasome core complex
PBANKA_113150	conserved Plasmodium protein, unknown function			PF3D7_1354900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_113160	minichromosome maintenance (MCM) complex subunit, putative (MCM6)			PF3D7_1355100	minichromosome maintenance (MCM) complex subunit (MCM6)	DNA replication	0	0	0	na	ATP binding, DNA binding	DNA replication, DNA-dependent DNA replication initiation	nucleus
PBANKA_113260	ubiquitin conjugating enzyme, putative			PF3D7_1356300	ubiquitin conjugating enzyme, putative	proteasome	0	0	0	na	small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null
PBANKA_113390	conserved Plasmodium protein, unknown function			PF3D7_1357600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_113460	rhomboid protease ROM7, putative (ROM7)			PF3D7_1358300	rhomboid protease ROM7 (ROM7)	rhomboid	0	0	0	KO not successful	null	null	integral to membrane
PBANKA_113500	conserved Plasmodium protein, unknown function			PF3D7_1358700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_113700	falcilysin, putative (FLN)			PF3D7_1360800	falcilysin (FLN)	protease	0	0	0	na	catalytic activity, metalloendopeptidase activity, zinc ion binding	proteolysis	apicoplast, food vacuole
PBANKA_113770	cytochrome c oxidase subunit 2, putative			PF3D7_1361700	cytochrome c oxidase subunit 2, putative	redoxmeth	0	0	0	na	copper ion binding, cytochrome-c oxidase activity	null	membrane
PBANKA_113790	proliferating cell nuclear antigen, putative (PCNA)			PF3D7_1361900	proliferating cell nuclear antigen (PCNA)	DNA replication	0	0	0	na	DNA binding, DNA polymerase processivity factor activity	regulation of DNA replication	PCNA complex
PBANKA_113820	RuvB-like helicase, putative (RUVB3)	-2.45	0.73	PF3D7_1362200	ATP-dependent DNA helicase, putative	DNA replication	0	0	0	na	ATP binding, DNA helicase activity, nucleoside-triphosphatase activity	null	nucleus
PBANKA_114060	DNA-directed RNA polymerase II, putative			PF3D7_1364800	DNA-directed RNA polymerase 2, putative	transcription	0	0	0	na	DNA binding, DNA-directed RNA polymerase activity	transcription, DNA-dependent	nucleus
PBANKA_114170	60S ribosomal protein L40/UBI, putative			PF3D7_1365900	60S ribosomal protein L40/UBI, putative	proteasome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_114280	conserved Plasmodium protein, unknown function			PF3D7_1366900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_114300	U1 small nuclear ribonucleoprotein, putative			PF3D7_1367100	U1 small nuclear ribonucleoprotein, putative	mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_114590	conserved rodent malaria protein, unknown function					unknown function	0	0	0	na	null	null	null
PBANKA_120010	BIR protein					BIR protein	0	0	0	na	null	null	null
PBANKA_120040	BIR protein					BIR protein	0	0	0	na	null	null	null
PBANKA_120060	Plasmodium exported protein, unknown function					unknown function	0	0	0	KO not successful	null	null	null
PBANKA_120150	conserved Plasmodium protein, unknown function			PF3D7_1003100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_120220	U5 small nuclear ribonuclear protein, putative			PF3D7_1003800	U5 small nuclear ribonuclear protein, putative	mRNA	0	0	0	na	GTP binding, GTPase activity	null	null
PBANKA_120240	60S ribosomal protein L13, putative			PF3D7_1004000	60S ribosomal protein L13, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, large ribosomal subunit, ribosome
PBANKA_120270	RNA-binding protein, putative	-2.26	0.75	PF3D7_1004400	RNA binding protein, putative	mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_120370	regulator of nonsense transcripts, putative			PF3D7_1005500	regulator of nonsense transcripts, putative	mRNA	0	0	0	na	ATP binding, DNA binding, helicase activity, zinc ion binding	nuclear-transcribed mRNA catabolic process, nonsense-mediated decay	cytoplasm
PBANKA_120420	conserved Plasmodium protein, unknown function			PF3D7_1006000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	DNA binding, alkylbase DNA N-glycosylase activity	base-excision repair	null
PBANKA_120440	DNA/RNA-binding protein Alba 3, putative (ALBA3)			PF3D7_1006200	DNA/RNA-binding protein Alba 3 (ALBA3)	mRNA	0	0	0	na	DNA binding, RNA binding	null	nucleus
PBANKA_120480	thioredoxin, putative			PF3D7_1006600	thioredoxin, putative	redoxmeth	0	0	0	na	null	null	null
PBANKA_120500	RNA-binding protein, putative			PF3D7_1006800	RNA binding protein, putative	mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_120540	rhoGAP GTPase, putative			PF3D7_1007200	rhoGAP GTPase, putative	gliding motility	0	0	0	na	null	signal transduction	intracellular

PBANKA_120660	26S proteasome regulatory subunit 4, putative			PF3D7_1008400	26S proteasome regulatory subunit 4, putative	proteasome	0	0	0	na	ATP binding, nucleoside-triphosphatase activity	protein catabolic process	cytoplasm, nucleus
PBANKA_120690	tubulin beta chain, putative			PF3D7_1008700	tubulin beta chain	gliding motility	0	0	0	na	GTP binding, GTPase activity, structural molecule activity	microtubule-based movement, protein polymerization	microtubule, protein complex
PBANKA_120700	small subunit rRNA processing protein, putative			PF3D7_1008800	small subunit rRNA processing protein, putative	RNA	0	0	0	na	null	null	null
PBANKA_120880	conserved Plasmodium protein, unknown function			PF3D7_1010400	conserved Plasmodium protein, unknown function	kinase	0	0	0	na	null	null	null
PBANKA_120890	conserved Plasmodium protein, unknown function					proteasome	0	0	0	na	null	null	null
PBANKA_120900	eukaryotic translation initiation factor 2, beta, putative			PF3D7_1010600	eukaryotic translation initiation factor 2 beta subunit, putative	translation	0	0	0	na	translation initiation factor activity	translational initiation	null
PBANKA_120990	conserved Plasmodium protein, unknown function			PF3D7_1011500	conserved Plasmodium membrane protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_121070	ubiquinol-cytochrome c reductase complex subunit, putative			PF3D7_1012300	ubiquinol-cytochrome c reductase complex subunit, putative	redoxmeth	0	0	0	na	ubiquinol-cytochrome-c reductase activity	mitochondrial electron transport, ubiquinol to cytochrome c	null
PBANKA_121090	phosphoglucomutase, putative			PF3D7_1012500	phosphoglucomutase, putative	glycolysis	0	0	0	na	intramolecular transferase activity, phosphotransferases	carbohydrate metabolic process	null
PBANKA_121260	male gamete fusion factor HAP2 (HAP2)			PF3D7_1014200	male gamete fusion factor HAP2, putative (HAP2)	sexual development	0	0	0	different in fertilization, ookinete, oocyst, sporozoite and liver stage	null	null	null
PBANKA_121270	conserved Plasmodium protein, unknown function			PF3D7_1014300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	not different from wild type	null	null	null
PBANKA_121300	transcriptional activator ADA2, putative			PF3D7_1014600	transcriptional coactivator ADA2 (ADA2)	transcription	0	0	0	na	DNA binding, zinc ion binding	null	null
PBANKA_121350	conserved Plasmodium protein, unknown function			PF3D7_1015100	conserved protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_121360	cysteinyl-tRNA synthetase, putative			PF3D7_1015200.1/2	cysteinyl-tRNA synthetase, putative	translation	0	0	0	na	ATP binding, cysteine-tRNA ligase activity	cysteinyl-tRNA aminoacylation, translation	cytoplasm
PBANKA_121400	heat shock protein 60, putative			PF3D7_1015600	heat shock protein 60 (HSP60)	chaperone	0	0	0	na	ATP binding, protein binding	cellular protein metabolic process	null
PBANKA_121430	enolase, putative (ENO)			PF3D7_1015900	enolase (ENO)	glycolysis	0	0	0	na	phosphopyruvate hydratase activity	glycolysis	phosphopyruvate hydratase complex
PBANKA_121470	conserved Plasmodium protein, unknown function			PF3D7_0323800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_121530	conserved Plasmodium protein, unknown function			PF3D7_0323200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_121650	peptidyl-prolyl cis-trans isomerase, putative (CYP19A)			PF3D7_0322000	peptidyl-prolyl cis-trans isomerase (CYP19A)	chaperone	0	0	0	na	peptidyl-prolyl cis-trans isomerase activity	null	null
PBANKA_121760	histone H2A variant, putative (H2A.Z)			PF3D7_0320900	histone H2A variant, putative (H2A.Z)	chromatin	0	0	0	na	DNA binding	nucleosome assembly	nucleosome, nucleus
PBANKA_121770	ATP-dependent RNA Helicase (DOZI)			PF3D7_0320800	ATP-dependent RNA helicase, putative (DOZI)	mRNA	0	0	0	different in fertilization and ookinete	ATP binding, ATP-dependent helicase activity, helicase activity, nucleic acid binding	null	null
PBANKA_121830	CPW-WPC family protein, putative	-2.75	0.75	PF3D7_0320200	CPW-WPC family protein	adhesin	0	0	0	na	null	null	null
PBANKA_121840	SNARE protein, putative			PF3D7_0320100	SNARE protein (SEC22)	trafficking	0	0	0	na	null	vesicle-mediated transport	integral to membrane
PBANKA_121850	conserved Plasmodium protein, unknown function			PF3D7_0320000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_121860	conserved Plasmodium protein, unknown function			PF3D7_0319900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_121890	elongation factor 1 (EF-1), putative					translation	0	0	0	na	translation elongation factor activity	translational elongation	eukaryotic translation elongation factor 1 complex
PBANKA_121900	heat shock protein 90, putative			PF3D7_0708500	heat shock protein 86 family protein	chaperone	0	0	0	na	null	null	null
PBANKA_121920	Cg8 protein, putative			PF3D7_0708700	Cg8 protein	redoxmeth	0	0	0	na	null	null	null
PBANKA_122120	60S ribosomal protein L34a, putative			PF3D7_0710600	60S ribosomal protein L34a, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_122130	conserved Plasmodium protein, unknown function			PF3D7_0710700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_122240	ubiquitin regulatory protein, putative			PF3D7_0808300	ubiquitin regulatory protein, putative	proteasome	0	0	0	na	null	null	null

PBANKA_122280	tyrosyl-tRNA synthetase, putative		PF3D7_0807900	tyrosyl-tRNA synthetase, putative	translation	0	0	0	na	ATP binding, tyrosine-tRNA ligase activity	translation, tyrosyl-tRNA aminoacylation	cytoplasm	
PBANKA_122420	DnaJ protein, putative		PF3D7_0806500	DnaJ protein, putative	chaperone	0	0	0	na	heat shock protein binding, unfolded protein binding	protein folding	null	
PBANKA_122540	conserved Plasmodium protein, unknown function		PF3D7_0805200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_122660	tubulin gamma chain, putative		PF3D7_0803700	tubulin gamma chain (g-tub)	gliding motility	0	0	0	na	GTP binding, GTPase activity	microtubule-based process, protein polymerization	microtubule, protein complex	
PBANKA_122680	DNA repair protein rad54, putative	-1.65	0.7	PF3D7_0803400	DNA repair protein rad54, putative	DNA repair	0	0	0	na	ATP binding, DNA binding, helicase activity	null	null
PBANKA_122720	peptidyl-prolyl cis-trans isomerase, putative (CYP81)		PF3D7_0803000	peptidyl-prolyl cis-trans isomerase (CYP81)	chaperone	0	0	0	na	peptidyl-prolyl cis-trans isomerase activity	null	null	
PBANKA_122740	serine/threonine protein phosphatase 2B catalytic subunit A, putative (CNA)		PF3D7_0802800	serine/threonine protein phosphatase, putative	phosphatase	0	0	0	na	hydrolase activity	null	null	
PBANKA_122780	conserved Plasmodium protein, unknown function		PF3D7_0802400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_122830	conserved Plasmodium protein, unknown function		PF3D7_0801900	conserved Plasmodium protein, unknown function	redoxmeth	0	0	0	na	electron carrier activity, oxidoreductase activity	null	null	
PBANKA_122920	60S ribosomal protein L19, putative		PF3D7_0614500	60S ribosomal protein L19, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome	
PBANKA_123005	ribonuclease, putative, fragment		PF3D7_0615400	ribonuclease, putative	mRNA	0	0	0	na	RNA binding, ribonuclease activity	null	null	
PBANKA_123100	40S ribosomal protein S14, putative		PF3D7_0516200	40S ribosomal protein S14, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome	
PBANKA_123160	transcription factor with AP2 domain(s), putative (ApiAP2)		PF3D7_0516800	transcription factor with AP2 domain(s) (ApiAP2)	transcription	0	0	0	na	sequence-specific DNA binding transcription factor activity	regulation of transcription, DNA-dependent	null	
PBANKA_123170	60S ribosomal protein L8, putative		PF3D7_0516900	60S ribosomal protein L8, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome	
PBANKA_123180	60S ribosomal protein L12, putative		PF3D7_0517000	60S ribosomal protein L12, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome	
PBANKA_123350	mRNA-binding protein PUF1 (PUF1)		PF3D7_0518700	mRNA-binding protein PUF1 (PUF1)	mRNA	0	0	0	different in fertilization, ookinete, oocyst, sporozoite and liver stage	RNA binding	null	null	
PBANKA_123420	40S ribosomal protein S24, putative		PF3D7_0519400	40S ribosomal protein S24, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome	
PBANKA_123450	conserved Plasmodium protein, unknown function		PF3D7_0519700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_123480	40S ribosomal protein S9, putative		PF3D7_0520000	40S ribosomal protein S9, putative	ribosome	0	0	0	na	rRNA binding, structural constituent of ribosome	translation	intracellular, small ribosomal subunit	
PBANKA_123510	U6 snRNA-associated sm-like protein lsm2, putative (LSM2)		PF3D7_0520300	U6 snRNA-associated sm-like protein lsm2, putative (LSM2)	mRNA	0	0	0	na	null	null	null	
PBANKA_123770	zinc finger protein, putative, fragment					0	0	0	na	null	null	null	
PBANKA_123880	karyopherin beta, putative		PF3D7_0524000	karyopherin beta (KASbeta)	nuclear pore	0	0	0	na	binding	null	null	
PBANKA_123920	cytosolic preribosomal GTP-binding protein, putative		PF3D7_0524400	cytosolic preribosomal GTP-binding protein, putative	ribosome assembly	0	0	0	na	GTP binding	null	intracellular	
PBANKA_123940	organelle ribosomal protein L7/L12 precursor, putative		PF3D7_0524600	organelle ribosomal protein L7/L12 precursor, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome	
PBANKA_123980	zinc finger protein, putative		PF3D7_0525000	zinc finger protein, putative	RNA binding, RNA processing	0	0	0	na	nucleic acid binding, zinc ion binding	null	null	
PBANKA_124180	minichromosome maintenance (MCM) complex subunit, putative (MCM3)		PF3D7_0527000	minichromosome maintenance (MCM) complex subunit, putative (MCM3)	DNA replication	0	0	0	na	ATP binding, DNA binding, nucleoside-triphosphatase activity	DNA replication, DNA-dependent DNA replication initiation	nucleus	
PBANKA_124190	ubiquitin-conjugating enzyme E2 N, putative (UBC13)		PF3D7_0527100	ubiquitin-conjugating enzyme E2 N, putative (UBC13)	proteasome	0	0	0	na	small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null	
PBANKA_124220	conserved Plasmodium protein, unknown function		PF3D7_0527400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_124230	58 kDa phosphoprotein, heat shock-related protein (HRP)		PF3D7_0527500	hsp70 interacting protein, putative	trafficking	0	0	0	na	null	chaperone cofactor-dependent protein refolding	null	
PBANKA_124310	F-actin capping protein, alpha subunit, putative		PF3D7_0528500	f-actin capping protein alpha subunit, putative	gliding motility	0	0	0	na	actin binding	actin cytoskeleton organization	F-actin capping protein complex	
PBANKA_124320	conserved Plasmodium protein, unknown function		PF3D7_0528600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null	

PBANKA_124590	Plasmodium exported protein, unknown function			unknown function	0	0	0	na	null	null	null	
PBANKA_124640	BIR protein			BIR protein	0	0	0	na	null	null	null	
PBANKA_124690	BIR protein, pseudogene			BIR protein	0	0	0	na	null	null	null	
PBANKA_130050	tubulin, putative		PF3D7_1475700	tubulin, putative	0	0	0	na	GTP binding, GTPase activity, structural molecule activity	microtubule-based movement, protein polymerization	microtubule, protein complex	
PBANKA_130070	LCCL domain-containing protein (CCp1)		PF3D7_1475500	LCCL domain-containing protein (CCp1)	0	0	0	different in oocyst and sporozoite; tagged also in fertilization and ookinete	receptor binding	cell adhesion, signal transduction	null	
PBANKA_130130	trailer hitch homolog, putative (CITH)		PF3D7_1474900	trailer hitch homolog, putative (CITH)	0	0	0	different in fertilization and ookinete	null	null	null	
PBANKA_130140	proteasome subunit alpha type 1, putative		PF3D7_1474800	proteasome subunit alpha type 1, putative	0	0	0	na	threonine-type endopeptidase activity	ubiquitin-dependent protein catabolic process	proteasome core complex	
PBANKA_130160	conserved Plasmodium protein, unknown function		PF3D7_1474600	conserved Plasmodium membrane protein, unknown function	0	0	0	na	null	null	null	
PBANKA_130260	small subunit DNA primase, putative		PF3D7_1438700	small subunit DNA primase	0	0	0	na	DNA primase activity	DNA replication, synthesis of RNA primer	null	
PBANKA_130280	thioredoxin peroxidase 1 (TPx1)		PF3D7_1438900	thioredoxin peroxidase 1 (TPx1)	0	0	0	different in sporozoite and liver stage	antioxidant activity, oxidoreductase activity	cell redox homeostasis	null	
PBANKA_130330	ubiquinol-cytochrome c reductase, iron-sulfur subunit, putative		PF3D7_1439400	ubiquinol-cytochrome c reductase iron-sulfur subunit, putative	0	0	0	na	2 iron, 2 sulfur cluster binding, electron carrier activity, ubiquinol-cytochrome-c reductase activity	oxidation-reduction process	membrane	
PBANKA_130350	conserved Plasmodium protein, unknown function		PF3D7_1439600	conserved Plasmodium protein, unknown function	0	0	0	na	null	null	mitochondrion	
PBANKA_130390	conserved Plasmodium protein, unknown function	-3.01	0.75	PF3D7_1440000	conserved Plasmodium protein, unknown function	0	0	0	na	RNA-directed RNA polymerase activity	viral genome replication	null
PBANKA_130510	60S ribosomal protein L10a, putative		PF3D7_1441200	60S ribosomal protein L1, putative	0	0	0	na	RNA binding	RNA processing	null	
PBANKA_130590	ADP-ribosylation-like factor, putative		PF3D7_1442000	ADP-ribosylation factor, putative	0	0	0	na	GTP binding	intracellular protein transport, small GTPase mediated signal transduction	intracellular	
PBANKA_130600	conserved Plasmodium protein, unknown function		PF3D7_1442100	conserved Plasmodium protein, unknown function	0	0	0	na	null	null	null	
PBANKA_130620	tRNA binding protein, putative		PF3D7_1442300	tRNA binding protein, putative	0	0	0	na	tRNA binding	null	null	
PBANKA_130770	zinc finger protein, putative		PF3D7_1443800	zinc finger protein, putative	0	0	0	na	nucleic acid binding, protein binding, zinc ion binding	null	null	
PBANKA_130810	calmodulin-like protein		PF3D7_1444200	calmodulin-like protein	0	0	0	na	null	null	null	
PBANKA_130920	serine/threonine kinase-1, putative		PF3D7_1445400	protein serine/threonine kinase-1 (CLK1)	0	0	0	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null	
PBANKA_130930	conserved Plasmodium protein, unknown function		PF3D7_1445500	conserved Plasmodium protein, unknown function	0	0	0	na	null	null	null	
PBANKA_131040	centrin, putative		PF3D7_1446600	centrin-2 (CEN2)	0	0	0	na	calcium ion binding	null	null	
PBANKA_131080	40S ribosomal protein S2, putative		PF3D7_1447000	40S ribosomal protein S2, putative	0	0	0	na	RNA binding, structural constituent of ribosome	translation	intracellular, ribosome, small ribosomal subunit	
PBANKA_131090	conserved Plasmodium protein, unknown function		PF3D7_1447100	conserved Plasmodium protein, unknown function	0	0	0	na	null	null	null	
PBANKA_131440	conserved Plasmodium protein, unknown function		PF3D7_1450700	conserved Plasmodium protein, unknown function	0	0	0	na	null	null	null	
PBANKA_131480	elongation factor 2, putative		PF3D7_1451100	elongation factor 2	0	0	0	na	GTP binding, GTPase activity	null	null	
PBANKA_131490	conserved Plasmodium protein, unknown function	-2.62	0.75	PF3D7_1451200	conserved Plasmodium protein, unknown function	0	0	0	na	null	null	null
PBANKA_131550	sortilin, putative		PF3D7_1451800	sortilin, putative	0	0	0	na	null	null	integral to membrane	
PBANKA_131740	co-chaperone p23, putative		PF3D7_1453700	co-chaperone p23 (P23)	0	0	0	na	null	null	null	
PBANKA_131890	conserved Plasmodium protein, unknown function		PF3D7_1455200.1/2	conserved Plasmodium protein, unknown function	0	0	0	na	methyltransferase activity	metabolic process	null	
PBANKA_132010	conserved Plasmodium protein, unknown function (UIS25)		PF3D7_1456400	conserved Plasmodium protein, unknown function	0	0	0	na	null	null	null	

PBANKA_132020	conserved Plasmodium protein, unknown function			PF3D7_1456500	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_132070	signal peptide peptidase, putative (SPP)			PF3D7_1457000	signal peptide peptidase (SPP)	post-translational modification	0	0	0	na	aspartic-type endopeptidase activity	null	endoplasmic reticulum, integral to membrane
PBANKA_132150	conserved Plasmodium protein, unknown function			PF3D7_1457800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_132400	ribosomal protein L29, putative			PF3D7_1460300	ribosomal protein L29, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_132510	conserved Plasmodium protein, unknown function			PF3D7_1461400	conserved Plasmodium protein, unknown function	kinase	0	0	0	na	null	null	null
PBANKA_132520	conserved Plasmodium protein, unknown function			PF3D7_1461500	conserved Plasmodium protein, unknown function	meiosis	0	0	0	na	null	null	null
PBANKA_132610	conserved Plasmodium protein, unknown function			PF3D7_1462500	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_132640	glyceraldehyde-3-phosphate dehydrogenase, putative			PF3D7_1462800	glyceraldehyde-3-phosphate dehydrogenase (GAPDH)	glycolysis	0	0	0	na	NAD binding, glyceraldehyde-3-phosphate dehydrogenase (NAD+) (phosphorylating) activity	glucose metabolic process	null
PBANKA_132730	conserved Plasmodium protein, unknown function					unknown function	0	0	0	na	null	null	null
PBANKA_132830	ATP-dependent protease 1a, putative			PF3D7_1464900	ATP-dependent protease 1a, putative	protease	0	0	0	na	ATP binding, metalloendopeptidase activity, nucleoside-triphosphatase activity, zinc ion binding	protein catabolic process, proteolysis	integral to membrane, membrane
PBANKA_132840	conserved Plasmodium protein, unknown function			PF3D7_1465000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_132900	conserved Plasmodium protein, unknown function			PF3D7_1465600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_132930	40S ribosomal protein S3, putative			PF3D7_1465900	40S ribosomal protein S3, putative	ribosome	0	0	0	na	RNA binding, structural constituent of ribosome	translation	intracellular, ribosome, small ribosomal subunit
PBANKA_132980	transcription factor with AP2 domain(s) (AP2-SP)			PF3D7_1466400	transcription factor with AP2 domain(s) (ApiAP2)	transcription	0	0	0	different in oocyst and sporozoite	sequence-specific DNA binding transcription factor activity	regulation of transcription, DNA-dependent	null
PBANKA_133140	conserved Plasmodium protein, unknown function			PF3D7_1468100	conserved Plasmodium protein, unknown function	galactose metabolism	0	0	0	KO not successful	ATP binding	null	null
PBANKA_133210	conserved Plasmodium protein, unknown function			PF3D7_1468900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_133300	conserved Plasmodium protein, unknown function			PF3D7_1469800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_133320	conserved Plasmodium protein, unknown function			PF3D7_1470000	ATG12	autophagy	0	0	0	na	null	autophagic vacuole assembly	cytoplasm
PBANKA_133480	conserved Plasmodium protein, unknown function	-2.16	0.72	PF3D7_1471600	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_133490	conserved Plasmodium protein, unknown function	-4.61	0.75			unknown function	0	0	0	na	null	null	null
PBANKA_133520	pre-mRNA-splicing factor, putative			PF3D7_1472000	pre-mRNA-splicing factor ISY1 homolog, putative	mRNA	0	0	0	na	null	null	null
PBANKA_133570	conserved Plasmodium protein, unknown function			PF3D7_1472500	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_133660	conserved Plasmodium protein, unknown function			PF3D7_1473400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_133690	conserved Plasmodium protein, unknown function					unknown function	0	0	0	na	null	null	null
PBANKA_133710	splicing factor, putative			PF3D7_1321700	splicing factor, putative	mRNA	0	0	0	na	RNA binding	mRNA processing	nucleus
PBANKA_133840	vacuolar ATP synthase subunit g, putative			PF3D7_1323200	vacuolar ATP synthase subunit g, putative	vacuolar ATP synthase	0	0	0	KO not successful	hydrolase activity, acting on acid anhydrides, catalyzing transmembrane movement of substances	proton transport	vacuolar proton-transporting V-type ATPase complex
PBANKA_133940	microfibril-associated protein homologue, putative			PF3D7_1324200	micro-fibrillar-associated protein, putative	gliding motility	0	0	0	na	null	null	extracellular region
PBANKA_134010	L-lactate dehydrogenase (LDH)			PF3D7_1324900	L-lactate dehydrogenase (LDH)	glycolysis	0	0	0	na	binding, oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor	glycolysis	null
PBANKA_134020	U6 snRNA-associated Sm-like protein LSM6, putative (LSM6)	-2.49	0.75	PF3D7_1325000	U6 snRNA-associated Sm-like protein LSM6, putative (LSM6)	mRNA	0	0	0	na	null	null	null
PBANKA_134040	oxidoreductase, putative			PF3D7_1325200	oxidoreductase, putative	glycolysis	0	0	0	na	binding, oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor	glycolysis	null
PBANKA_134150	RNA binding protein, putative			PF3D7_1326300	RNA binding protein, putative	mRNA	0	0	0	na	nucleic acid binding	null	null

PBANKA_134320	conserved Plasmodium protein, unknown function	PF3D7_1328000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_134560	elongation factor Tu, putative	PF3D7_1330600	elongation factor Tu, putative	translation	0	0	0	na	GTP binding, GTPase activity, translation elongation factor activity	translational elongation	intracellular
PBANKA_134610	conserved Plasmodium protein, unknown function	PF3D7_1331200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_134840	histone h3-like centromeric protein cse4, putative (CENPA)	PF3D7_1333700	histone H3 variant, putative (CenH3)	chromatin	0	0	0	na	DNA binding	nucleosome assembly	nucleosome, nucleus
PBANKA_135000	conserved Plasmodium protein, unknown function	PF3D7_1336100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_135030	glucose-induced degradation protein 8, putative (GID8)	PF3D7_1336400	glucose-induced degradation protein 8, putative (GID8)	protein-protein interaction	0	0	0	na	null	null	null
PBANKA_135050	conserved Plasmodium protein, unknown function	PF3D7_1336700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	calcium ion binding	null	null
PBANKA_135130	conserved Plasmodium protein, unknown function			unknown function	0	0	0	na	null	null	null
PBANKA_135210	conserved Plasmodium protein, unknown function	PF3D7_1338400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_135430	sodium-dependent phosphate transporter, putative (PIT)	PF3D7_1340900	sodium-dependent phosphate transporter (PIT)	acidocalcisome, transporter	0	0	0	na	inorganic phosphate transmembrane transporter activity	phosphate ion transport	membrane
PBANKA_135440	60S ribosomal protein L18, putative	PF3D7_1341200	60S ribosomal protein L18, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_135450	60S ribosomal protein L18-2, putative	PF3D7_1341300	60S ribosomal protein L18-2, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_135500	vacuolar ATP synthase subunit d, putative	PF3D7_1341900	vacuolar ATP synthase subunit d, putative	vacuolar ATP synthase	0	0	0	na	proton-transporting ATPase activity, rotational mechanism	ATP synthesis coupled proton transport	proton-transporting two-sector ATPase complex, catalytic domain
PBANKA_135510	40S ribosomal protein S6, putative	PF3D7_1342000	40S ribosomal protein S6, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_135550	casein kinase II beta chain, putative	PF3D7_1342400	casein kinase II beta chain (CK2beta2)	kinase	0	0	0	na	protein kinase regulator activity	null	protein kinase CK2 complex
PBANKA_135580	transcription activator, putative	PF3D7_1342700	transcription activator, putative	transcription	0	0	0	na	DNA binding, DNA-directed RNA polymerase activity	transcription, DNA-dependent	null
PBANKA_135630	conserved Plasmodium protein, unknown function	PF3D7_1343300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_135670	kelch protein k13, putative	PF3D7_1343700	kelch protein, putative	galactose metabolism	0	0	0	na	protein binding, voltage-gated potassium channel activity	potassium ion transport	membrane, voltage-gated potassium channel complex
PBANKA_135780	conserved Plasmodium protein, unknown function	PF3D7_1344900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_135830	conserved Plasmodium protein, unknown function	PF3D7_1345400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_135980	conserved Plasmodium protein, unknown function	PF3D7_1346900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_136030	DNA/RNA-binding protein Alba 4, putative (ALBA4)	PF3D7_1347500	DNA/RNA-binding protein Alba 4 (ALBA4)	mRNA	0	0	0	na	DNA binding, RNA binding	null	cytoplasm, nucleus
PBANKA_136120	conserved Plasmodium protein, unknown function	PF3D7_1348400	conserved Plasmodium membrane protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_136150	conserved Plasmodium protein, unknown function	PF3D7_1348700	conserved Plasmodium protein, unknown function	phototransduction	0	0	0	na	null	null	null
PBANKA_136200	glutamate-tRNA ligase, putative	PF3D7_1349200	glutamate-tRNA ligase, putative	translation	0	0	0	na	ATP binding, glutamate-tRNA ligase activity	glutamyl-tRNA aminoacylation, translation	cytoplasm
PBANKA_136420	60S ribosomal protein L17, putative	PF3D7_1351400	60S ribosomal protein L17, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, large ribosomal subunit, ribosome
PBANKA_140010	BIR protein			BIR protein	0	0	0	na	null	null	null
PBANKA_140060	cytoadherence linked asexual protein, putative				0	0	0	KO not successful	null	null	null
PBANKA_140070	Plasmodium exported protein, unknown function			unknown function	0	0	0	na	null	null	null
PBANKA_140150	conserved Plasmodium protein, unknown function	PF3D7_1303000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_140260	DNA ligase I, putative	PF3D7_1304100	DNA ligase I (LigI)	DNA repair	0	0	0	KO not successful	ATP binding, DNA binding, DNA ligase (ATP) activity	DNA recombination, DNA repair, DNA replication	null

PBANKA_140490	26s protease regulatory subunit 10b, putative (RPT4)	PF3D7_1306400	26S proteasome regulatory subunit, putative	proteasome	0	0	0	na	ATP binding, nucleoside-triphosphatase activity	protein catabolic process	cytoplasm, nucleus
PBANKA_140610	DNA-directed RNA polymerase alpha chain, putative	PF3D7_1307600	DNA-directed RNA polymerase alpha chain, putative	transcription	0	0	0	na	DNA binding, DNA-directed RNA polymerase activity, protein dimerization activity	transcription, DNA-dependent	null
PBANKA_140700	conserved Plasmodium protein, unknown function	PF3D7_1308500	conserved Plasmodium protein, unknown function	glycolysis	0	0	0	na	null	null	null
PBANKA_140740	mRNA-decapping enzyme 2, putative (DCP2)	PF3D7_1308900	mRNA-decapping enzyme 2, putative (DCP2)	mRNA	0	0	0	na	hydrolase activity	null	null
PBANKA_140760	60S ribosomal protein L24, putative	PF3D7_1309100	60S ribosomal protein L24, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_140780	U4/U6 small nuclear ribonucleoprotein PRP3, putative (PRPF3)	PF3D7_1309300	U4/U6 small nuclear ribonucleoprotein PRP3, putative (PRPF3)	mRNA	0	0	0	na	null	null	null
PBANKA_140920	ma-binding protein, putative	PF3D7_1310700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	nucleic acid binding	null	null
PBANKA_140960	conserved Plasmodium protein, unknown function	PF3D7_1311100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_141000	26s protease regulatory subunit 7, putative (RPT1)	PF3D7_1311500	26S proteasome regulatory subunit 7, putative	proteasome	0	0	0	na	ATP binding, nucleoside-triphosphatase activity	protein catabolic process	cytoplasm, nucleus
PBANKA_141120	conserved Plasmodium protein, unknown function	PF3D7_1312800	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_141140	ubiquitin-like protein nedd8 homologue, putative	PF3D7_1313000	ubiquitin-like protein nedd8 homologue, putative (Nedd8)	proteasome	0	0	0	na	null	null	null
PBANKA_141170	peptidyl-prolyl cis-trans isomerase, putative	PF3D7_1313300	peptidyl-prolyl cis-trans isomerase, putative	chaperone	0	0	0	na	null	protein folding	null
PBANKA_141320	conserved Plasmodium protein, unknown function	PF3D7_1314700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_141400	conserved Plasmodium protein, unknown function	PF3D7_1315500	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_141470	ADP-ribosylation factor, putative	PF3D7_1316200	ADP-ribosylation factor, putative	trafficking	0	0	0	KO not successful	GTP binding	small GTPase mediated signal transduction	intracellular
PBANKA_141560	minichromosome maintenance (MCM) complex subunit, putative (MCM4)	PF3D7_1317100	minichromosome maintenance (MCM) complex subunit (MCM4)	DNA replication	0	0	0	na	ATP binding, DNA binding	DNA replication, DNA-dependent DNA replication initiation	nucleus
PBANKA_141630	40S ribosomal protein S15/S19, putative	PF3D7_1317800	40S ribosomal protein S15/S19, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome, small ribosomal subunit
PBANKA_141690	chromosome segregation protein, putative	PF3D7_1318400	chromosome segregation protein, putative	chromatin	0	0	0	na	ATP binding, protein binding	chromosome organization	chromosome
PBANKA_141730	translocation protein sec63, putative	PF3D7_1318800	secretory complex protein 63 (SEC63)	trafficking	0	0	0	na	heat shock protein binding, unfolded protein binding	protein folding	null
PBANKA_141840	ATP-dependent Clp protease adaptor protein, putative	PF3D7_1320100	ATP-dependent Clp protease adaptor protein ClpS, putative	chaperone	0	0	0	na	null	protein catabolic process	null
PBANKA_142050	conserved Plasmodium protein, unknown function	PF3D7_0713900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_142070	conserved Plasmodium protein, unknown function	PF3D7_0714100	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_142100	calmodulin, putative	PF3D7_0714400	calmodulin, putative	kinase	0	0	0	na	null	null	null
PBANKA_142350	60S ribosomal protein L13-2, putative	PF3D7_0814000	60S ribosomal protein L13-2, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_142360	40S ribosomal protein S16, putative	PF3D7_0813900	40S ribosomal protein S16, putative	ribosome	0	0	0	na	structural constituent of ribosome	translation	intracellular, ribosome
PBANKA_142430	conserved Plasmodium protein, unknown function	PF3D7_0813300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_142490	ubiquitin-conjugating enzyme, putative	PF3D7_0812600	ubiquitin conjugating enzyme, putative	proteasome	0	0	0	na	small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null
PBANKA_142510	karyopherin alpha, putative (KARalpha)	PF3D7_0812400	karyopherin alpha (KARalpha)	nuclear pore	0	0	0	na	binding, protein transporter activity	protein import into nucleus	cytoplasm, nuclear pore, nucleus
PBANKA_142620	CCR4-associated factor 1, putative (CAF1)	PF3D7_0811300	CCR4-associated factor 1 (CAF1)	mRNA	0	0	0	KO not successful	nucleic acid binding	null	nucleus
PBANKA_142690	RNA helicase, putative	PF3D7_0810600	RNA helicase, putative	mRNA	0	0	0	na	ATP binding, ATP-dependent helicase activity, helicase activity, nucleic acid binding	null	null
PBANKA_142750	acyl CoA binding protein, putative	PF3D7_0810000	acyl-CoA binding protein, putative	lipid metabolism	0	0	0	na	fatty-acyl-CoA binding	null	null

PBANKA_142870	eukaryotic translation initiation factor 3 subunit 10, putative			PF3D7_1212700	eukaryotic translation initiation factor 3 subunit 10, putative	translation	0	0	0	na	null	null	null
PBANKA_142890	bromodomain protein, putative			PF3D7_1212900	bromodomain protein, putative	chromatin	0	0	0	na	null	null	nucleus
PBANKA_142940	dynein light chain 1, putative			PF3D7_1213600	dynein light chain 1, putative	dynein/kinesin	0	0	0	na	microtubule motor activity	microtubule-based process	microtubule associated complex
PBANKA_143120	conserved Plasmodium protein, unknown function			PF3D7_1215500	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	cAMP-dependent protein kinase regulator activity	signal transduction	null
PBANKA_143140	conserved Plasmodium protein, unknown function			PF3D7_1215700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_143200	signal recognition particle 19 kD protein, putative			PF3D7_1216300	signal recognition particle SRP19 (SRP19)	post-translational modification	0	0	0	na	7S RNA binding	SRP-dependent cotranslational protein targeting to membrane	signal recognition particle
PBANKA_143220	male development gene 1 (MDV1)			PF3D7_1216500	male development gene 1 (MDV1)	egress, sexual development	0	0	0	different in fertilization, ookinete, oocyst and sporozoite	null	null	null
PBANKA_143240	perforin like protein 2 (PPLP2)			PF3D7_1216700	perforin like protein 2 (PPLP2)	perforin	0	0	0	different in fertilization, ookinete and oocyst	null	null	null
PBANKA_143300	conserved Plasmodium protein, unknown function			PF3D7_1217400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_143330	conserved Plasmodium protein, unknown function			PF3D7_1217700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_143400	phosphate translocator, putative			PF3D7_1218400	triose or hexose phosphate/phosphate translocator, putative	transporter	0	0	0	na	null	null	null
PBANKA_143440	secreted ookinete protein, putative (PSOP17)			PF3D7_1218800	conserved Plasmodium protein, unknown function (PSOP17)	adhesin	0	0	0	KO not successful	null	null	null
PBANKA_143480	aminophospholipid-transporting P-ATPase, putative			PF3D7_1219600	aminophospholipid-transporting P-ATPase (ATPase2)	transporter	0	0	0	KO not successful	ATP binding, ATPase activity, coupled to transmembrane movement of ions, phospholipase reaction, regulation of binding, phospholipid metabolism, ATPase activity	ATP biosynthetic process, phospholipid transport	integral to membrane, membrane
PBANKA_143520	conserved Plasmodium protein, unknown function			PF3D7_1220000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_143570	ribosome biogenesis protein TSR3, putative (TSR3)			PF3D7_1220500	ribosome biogenesis protein TSR3, putative (TSR3)	ribosome	0	0	0	na	null	null	null
PBANKA_143610	heterochromatin protein 1, putative (HP1)			PF3D7_1220900	heterochromatin protein 1 (HP1)	chromatin	0	0	0	na	chromatin binding	chromatin assembly or disassembly	chromatin, nucleus
PBANKA_143650	conserved Plasmodium protein, unknown function	-1.92	0.74	PF3D7_1221300	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_143710	conserved Plasmodium protein, unknown function			PF3D7_1221900	conserved Plasmodium membrane protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_143730	endoplasmic homolog precursor, putative			PF3D7_1222300	endoplasmic homolog precursor, putative		0	0	0	na	ATP binding, unfolded protein binding	protein folding, response to stress	null
PBANKA_143740	ATP-binding protein, putative			PF3D7_1222500	ATP-binding protein, putative		0	0	0	na	null	null	null
PBANKA_143800	cAMP-dependent protein kinase regulatory subunit, putative (PKAr)			PF3D7_1223100	cAMP-dependent protein kinase regulatory subunit (PKAr)	kinase	0	0	0	na	cAMP-dependent protein kinase regulator activity	regulation of protein phosphorylation	cAMP-dependent protein kinase complex
PBANKA_143920	polyadenylate-binding protein, putative (PABP)			PF3D7_1224300	polyadenylate-binding protein, putative (PABP)	mRNA	0	0	0	na	RNA binding	null	null
PBANKA_143980	splicing factor 3b subunit, putative (SF3B14)			PF3D7_1224900	splicing factor 3b subunit, putative (SF3B14)	mRNA	0	0	0	na	nucleic acid binding	null	null
PBANKA_144110	hydrolase, putative			PF3D7_1226300	cof-like hydrolase, had-superfamily, subfamily iib	hydrolase	0	0	0	na	hydrolase activity	metabolic process	null
PBANKA_144180	conserved Plasmodium protein, unknown function			PF3D7_1227000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_144300	NIMA related kinase 1, putative (NEK1)			PF3D7_1228300	NIMA related kinase 1 (NEK1)	kinase	0	0	0	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_144540	transport protein Sec13, putative			PF3D7_1230700	protein transport protein Sec13, putative	trafficking	0	0	0	na	null	null	null
PBANKA_144570	conserved Plasmodium protein, unknown function	-1.74	0.7	PF3D7_1231000	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_144590	conserved Plasmodium protein, unknown function			PF3D7_1231200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null
PBANKA_144900	conserved Plasmodium protein, unknown function			PF3D7_1234400	conserved Plasmodium protein, unknown function	unknown function	0	0	0	KO not successful	aspartic-type endopeptidase activity	proteolysis	null
PBANKA_144950	conserved Plasmodium protein, unknown function			PF3D7_1234900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null

PBANKA_145020	serine hydroxymethyltransferase, putative (SHMT)		PF3D7_1235600	serine hydroxymethyltransferase (SHMT)	pyrimidine metabolism	0	0	0	na	glycine hydroxymethyltransferase activity	L-serine metabolic process, glycine metabolic process	null	
PBANKA_145070	clustered-asparagine-rich protein, putative		PF3D7_1236100	clustered-asparagine-rich protein		0	0	0	na	nucleic acid binding, protein binding	null	null	
PBANKA_145150	conserved Plasmodium protein, unknown function		PF3D7_1236900	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_145240	ubiquitin-like modifier hub1, putative (HUB1)		PF3D7_1237800	ubiquitin-like protein, putative	proteasome	0	0	0	na	null	null	null	
PBANKA_145250	conserved Plasmodium protein, unknown function		PF3D7_1237900	conserved Plasmodium protein, unknown function	RNA	0	0	0	na	null	null	null	
PBANKA_145270	conserved Plasmodium protein, unknown function		PF3D7_1238200	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_145340	protein kinase 2 (PK2)	-2.9	0.75	PF3D7_1238900	protein kinase 2 (PK2)	kinase	0	0	0	KO not successful	ATP binding, protein serine/threonine kinase activity, protein tyrosine kinase activity	protein phosphorylation	null
PBANKA_145480	RNA binding protein, putative		PF3D7_1241400	RNA binding protein, putative	mRNA	0	0	0	na	nucleic acid binding	null	null	
PBANKA_145510	replication factor C subunit 4, putative		PF3D7_1241700	replication factor C subunit 4, putative	DNA replication	0	0	0	na	ATP binding, DNA clamp loader activity	DNA replication	DNA replication factor C complex	
PBANKA_145570	conserved Plasmodium protein, unknown function		PF3D7_1242300	conserved Plasmodium membrane protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_145680	endosome sorting protein (SNF7 homologue), putative		PF3D7_1243500	endosome sorting protein (SNF7 homologue), putative	large tethering	0	0	0	na	null	protein transport	null	
PBANKA_145690	translation initiation factor SU11, putative		PF3D7_1243600	translation initiation factor SU11, putative	translation	0	0	0	na	translation initiation factor activity	translation, translational initiation	null	
PBANKA_145720	double C2-like domain-containing protein, putative (DOC2)		PF3D7_1243900	double C2-like domain-containing protein (DOC2)	trafficking, transporter	0	0	0	na	null	entry into host	null	
PBANKA_145780	ADP-ribosylation factor, putative		PF3D7_1244600	ADP-ribosylation factor GTPase-activating protein, putative	trafficking	0	0	0	na	ARF GTPase activator activity, zinc ion binding	regulation of ARF GTPase activity	null	
PBANKA_145790	conserved Plasmodium protein, unknown function		PF3D7_1244700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_145850	nedd8-conjugating enzyme ubc12, putative (UBC12)		PF3D7_1245300	ubiquitin conjugating enzyme E2, putative	proteasome	0	0	0	na	ATP binding, small conjugating protein ligase activity	post-translational protein modification, regulation of protein metabolic process	null	
PBANKA_145930	actin I		PF3D7_1246200	actin I (ACT1)	gliding motility	0	0	0	na	protein binding	null	cytoplasm, nucleus	
PBANKA_146060	conserved Plasmodium protein, unknown function		PF3D7_1247700	conserved Plasmodium protein, unknown function	unknown function	0	0	0	na	uroporphyrinogen-III synthase activity	tetrapyrrole biosynthetic process	null	
PBANKA_146120	conserved Plasmodium protein, unknown function		PF3D7_1248300	conserved Plasmodium membrane protein, unknown function	unknown function	0	0	0	na	null	null	null	
PBANKA_146140	conserved Plasmodium protein, unknown function		PF3D7_1248500	conserved protein, unknown function	apoptosis	0	0	0	na	null	null	null	
PBANKA_146180	tat-binding protein homolog, putative		PF3D7_1248900	tat-binding protein homolog	proteasome	0	0	0	na	ATP binding, nucleoside-triphosphatase activity	protein catabolic process	cytoplasm, nucleus	
PBANKA_146300	osmiophilic body protein (G377)		PF3D7_1250100	osmiophilic body protein (Pfg377)	adhesin	0	0	0	not different from wild type	null	null	osmiophilic body	