

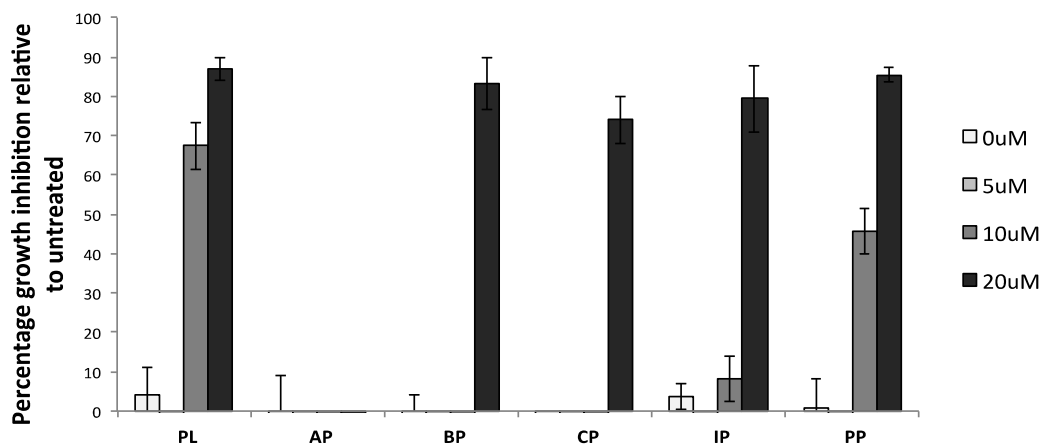
## SUPPLEMENTARY MATERIAL

**Supplementary File 1. The Sequences of TaqMan Primers, Probes and ID's Gene Expression Assays Used for Real Time PCR Analysis in the Present Study**

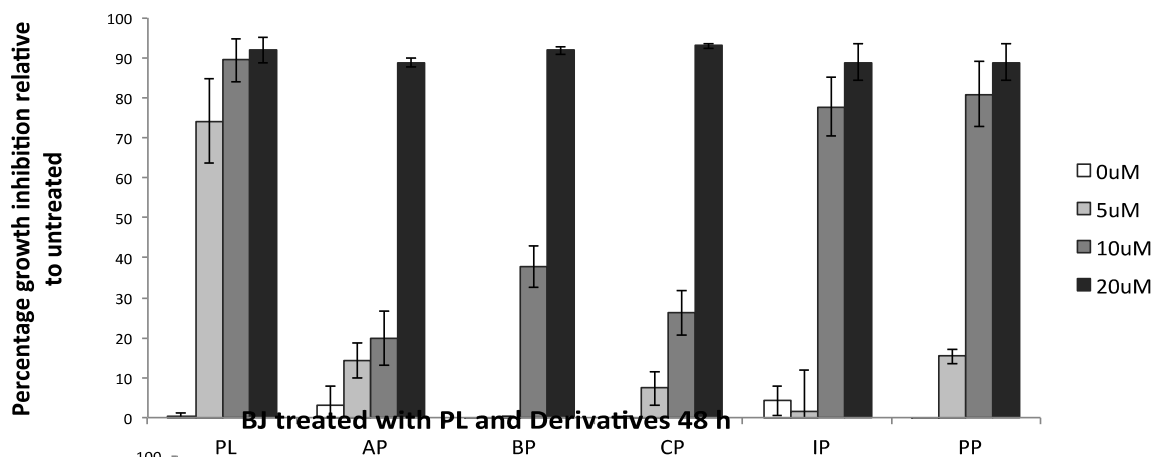
Target	Sequence
p53 Forward Primer	5'-GCCCCCAGGGAGCACTA-3'
p53 Reverse Primer	5'-GGGAGAGGAGCTGGTGTG-3'
p53 Probe	5'-TTGGGCAGTGCTCGCT-3'
Bax Forward primer	5'-TCCCCCGAGAGGTCTTT-3'
Bax Reverse primer	5'-CGGCCCCAGTTGAAGTTG-3'
Bax Probe	5'-TCAGAAAACATGTCAGCTGCCACTCGG-3'
Mdm2 Forward primer	5'-TTACCCAGGCTGGAGTGCAG-3'
Mdm2 Reverse primer	5'-GAGAATGGTGCGAACCCG-3'
Mdm2 Probe	5'-TGGCTCACTGCAAGCTCTGCCCTC-3'
Bcl2 Forward primer	5'-CATGTGTGTGGAGAGCGTCAA-3'
Bcl2 Reverse primer	5'-GCCGGTTCAGGTAAGTCACTCA-3'
Bcl2 Probe	5'-CCTGGTGGACAACATCGCCCTGT-3'
NF-kB Forward Primer	5'-AGCACAGATACCACCAAGACCC-3'
NF-k B Reverse Primer	5'-CCAGGGAGATGCGCACTG-3'
NF-k B Probe	5'-CATCAAGATCAATGGCTACACAGGACCAGG-3'
GAPDH Forward primer	5'-AGCCTCAAGATCATCAGCAATG-3'
GAPDH Reverse primer	5'-ATGGACTGTGGTCATGAGTCCTT-3'
GAPDH Probe	5'-CCAAGTCTTAGCACCCCTGGCC-3'
Casp7 Taqman Assay	ID: Hs00169152_m1
Bad Taqman Assay	ID: Hs00188930_m1

(a)

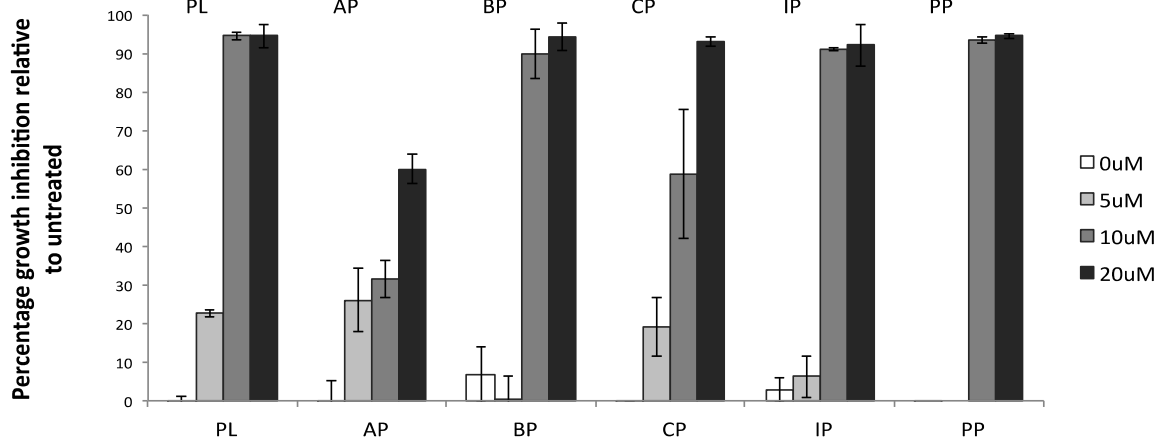
**BJ treated with PL and Derivatives 12 h**



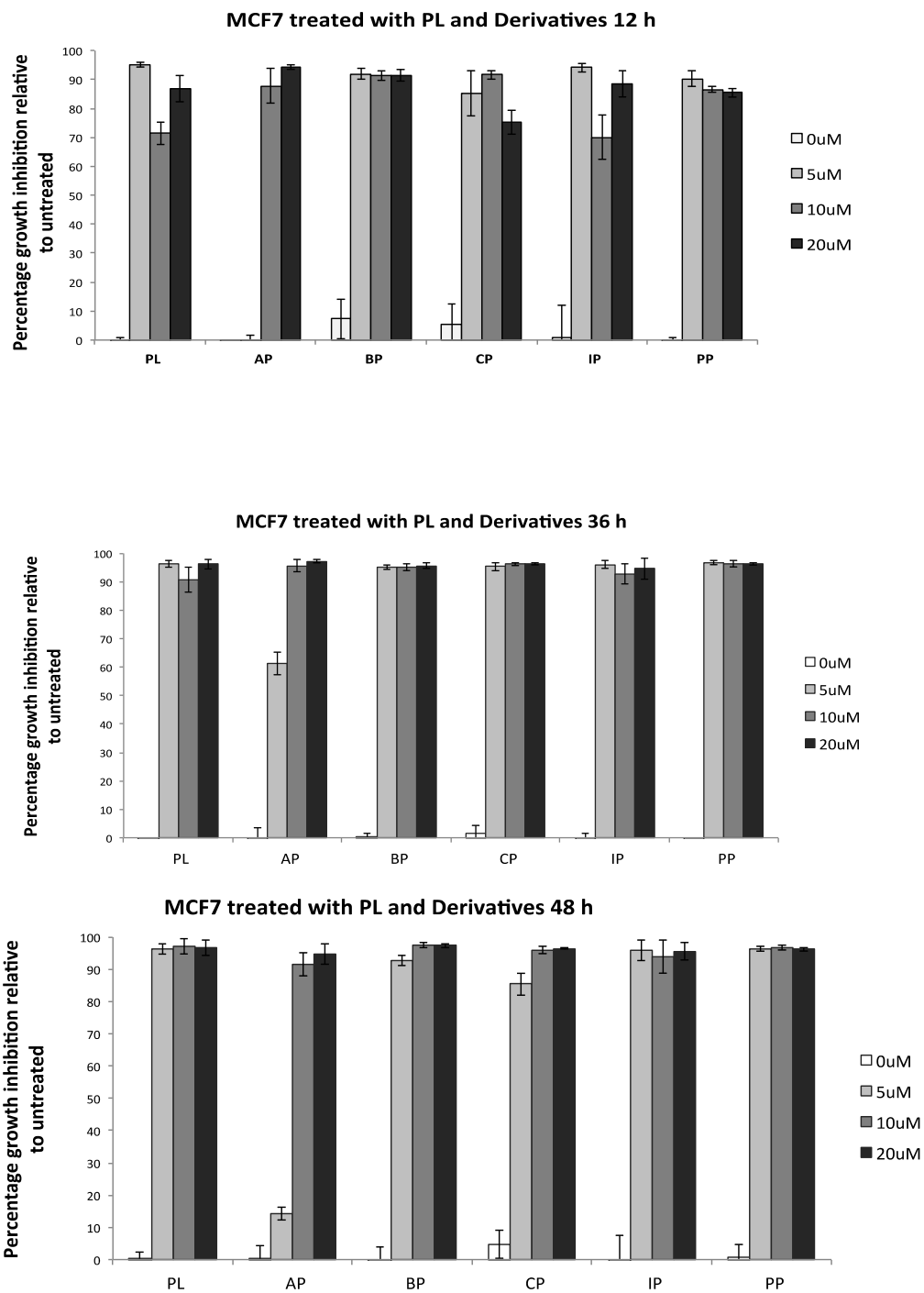
**BJ treated with PL and Derivatives 36 h**



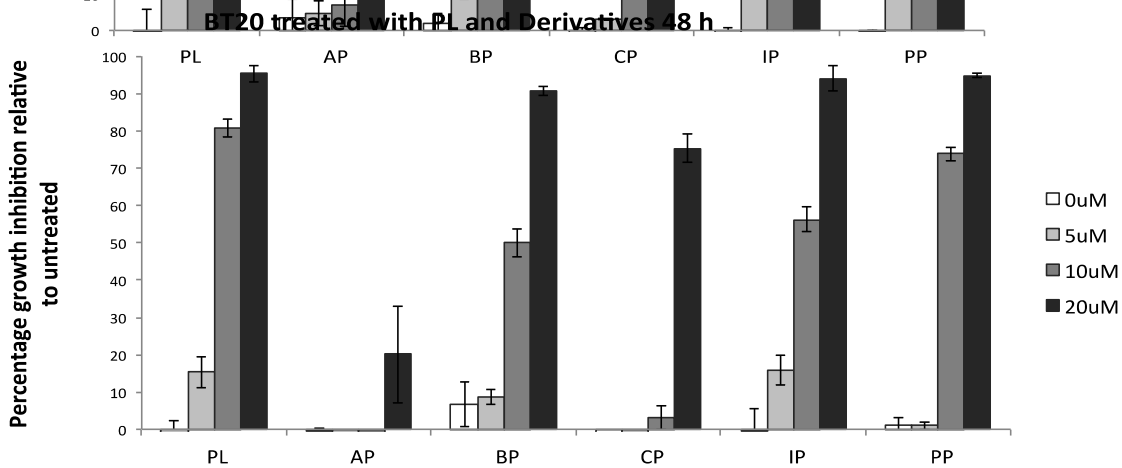
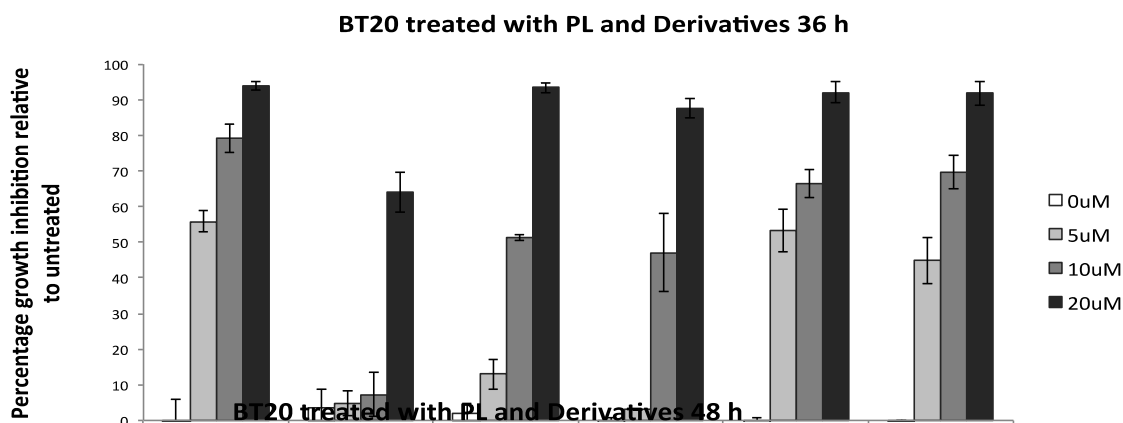
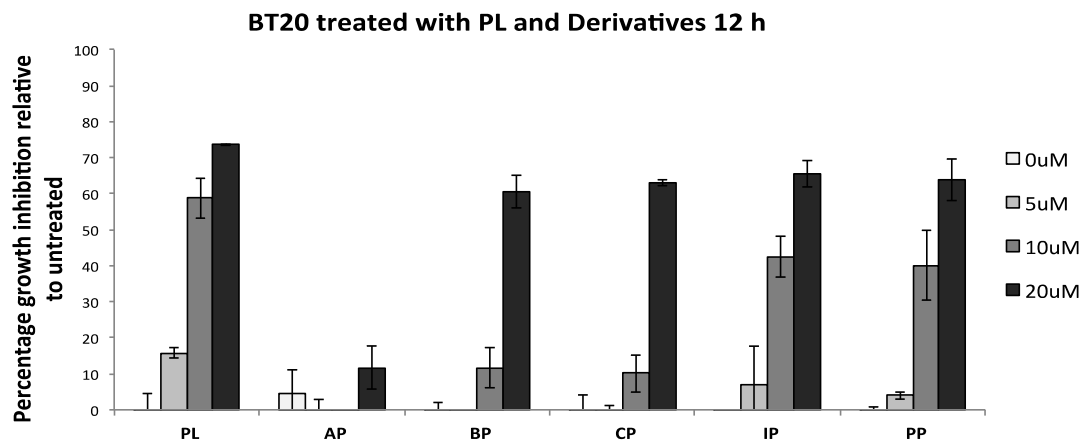
**BJ treated with PL and Derivatives 48 h**



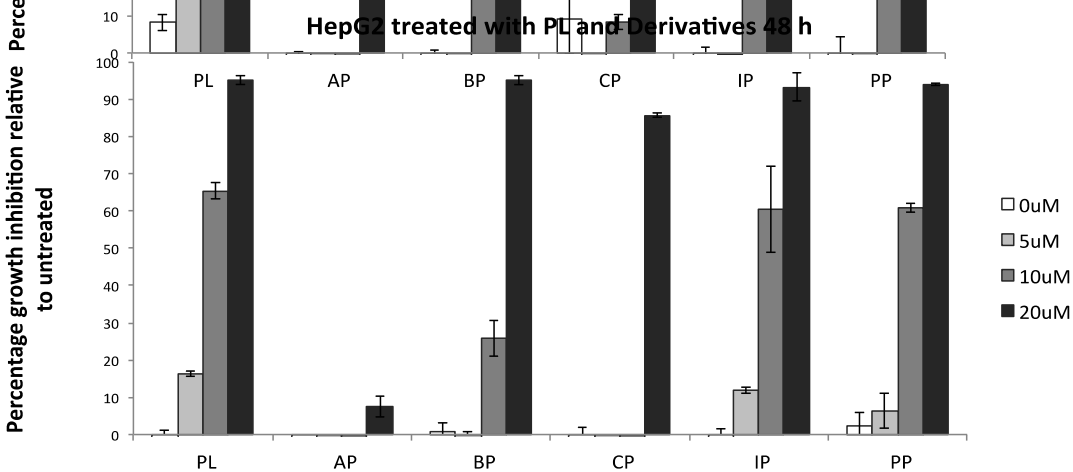
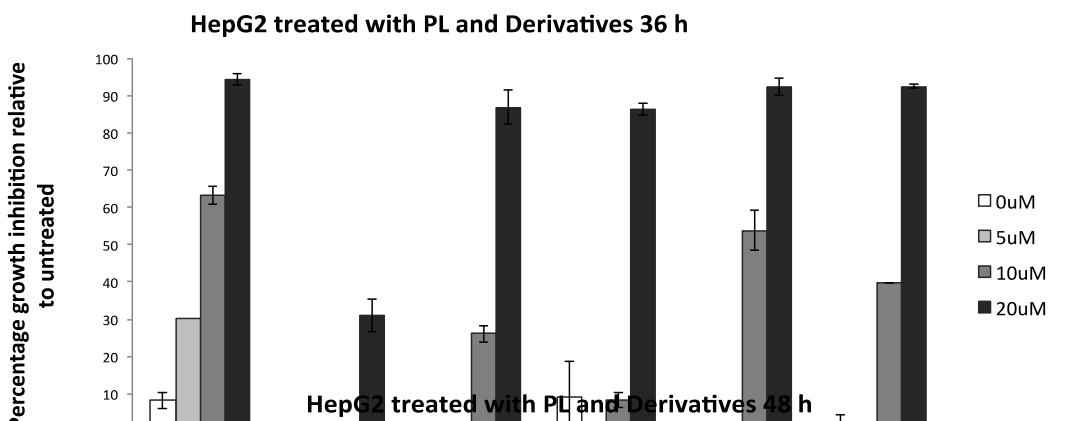
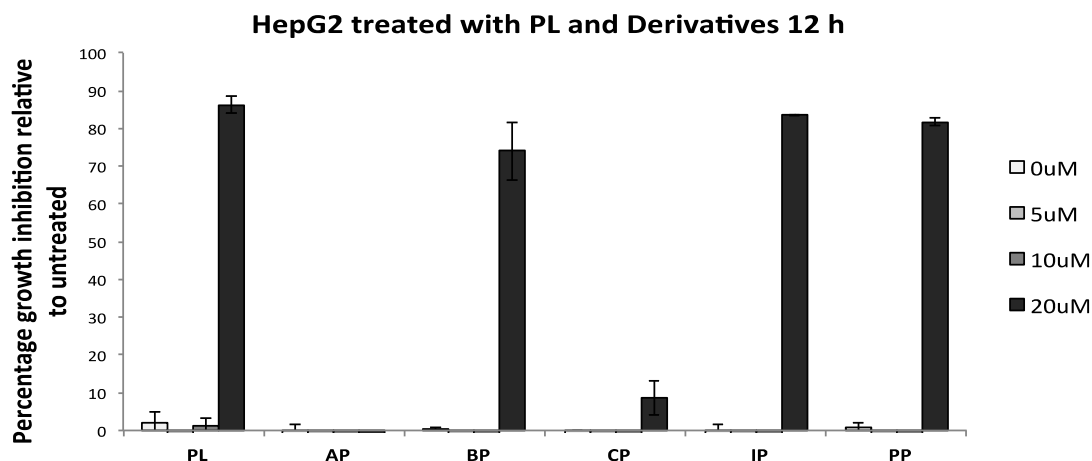
(b)



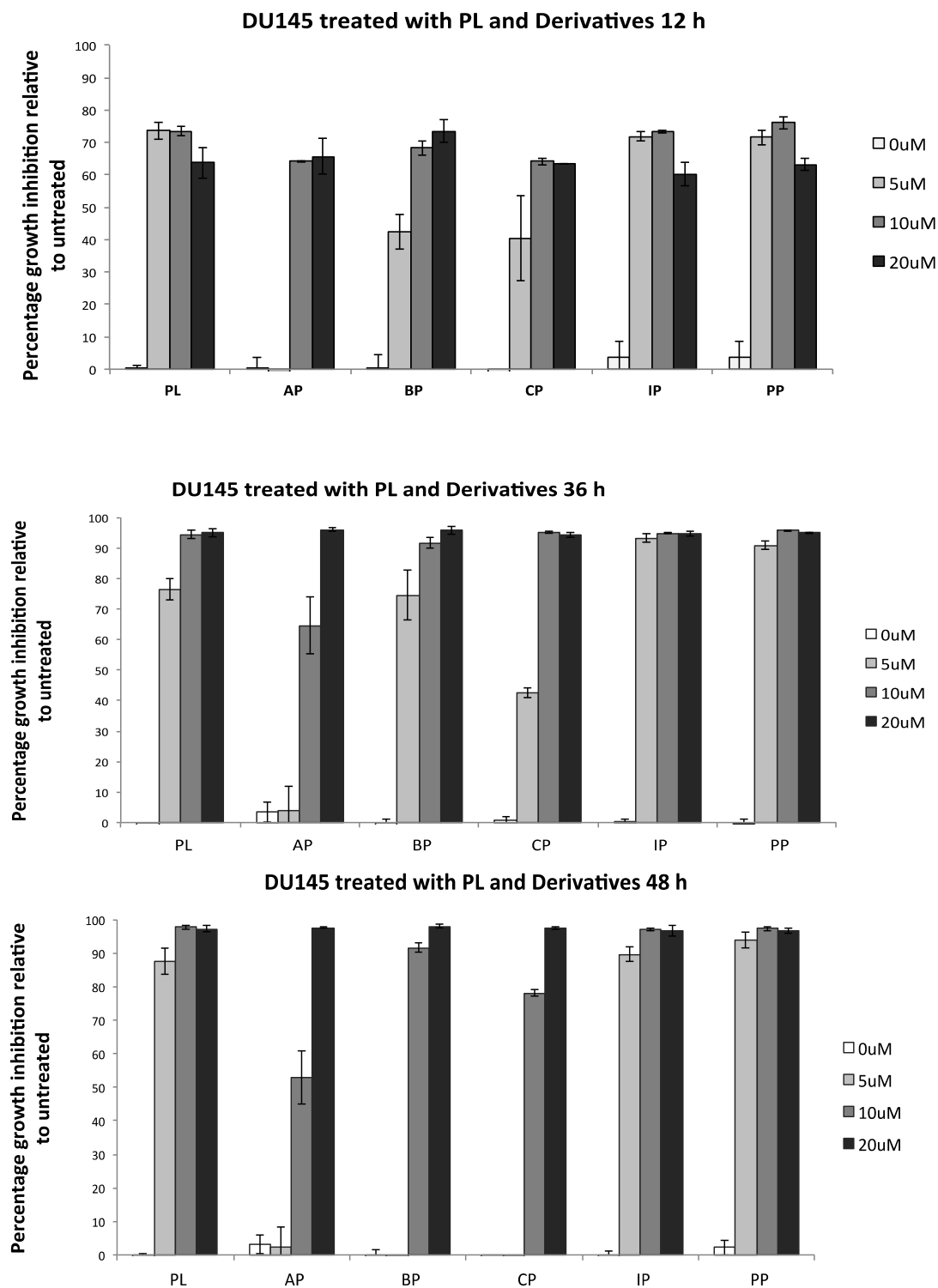
(c)



(d)



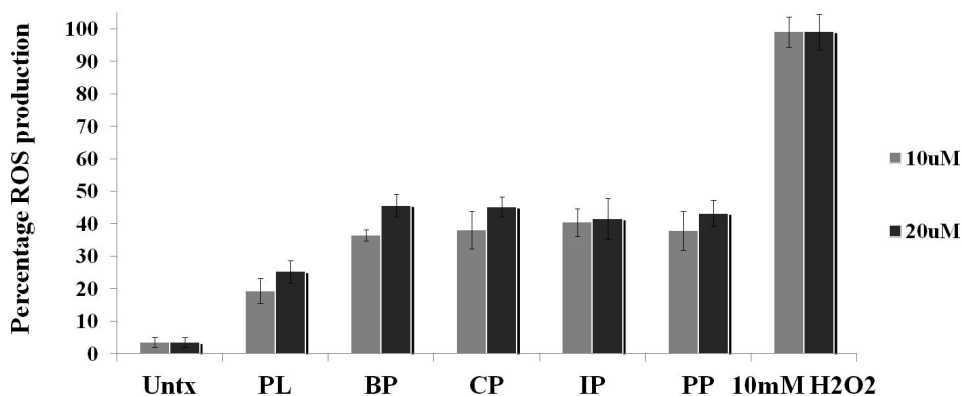
(e)



**Supplementary file 2:** PL and derivatives (AP, BP, CP, IP, and PP) induced growth inhibition in cancer and normal cells within 12, 36 and 48 h of treatment (read 0  $\mu$ M as untreated). Growth inhibition was assessed using MTT assay. Data are mean $\pm$ S.D. (n=3). Growth inhibition at 12, 36 and 48 h for (a) BJ cells, (b) MCF-7 cells, (c) BT20 cells, (d) HepG2 cells, (e) DU145 cells and (f) HeLa cells.

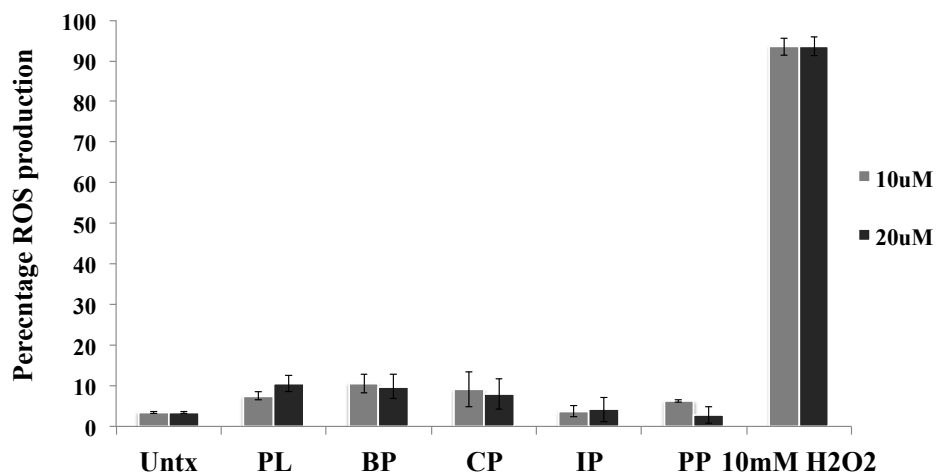
(a)

ROS activity in MCF-7 Cells treated with PL and Derivatives for 2 h



(b)

ROS activity in BT20 treated with PL and Derivatives for 2 h



**Supplementary file 3:** PL and derivatives (BP, CP, IP, and PP) induced ROS production in cancer cells, (a) MCF-7 cells and (b) BT20 cells, within 2 h of treatment (read Untx as untreated). ROS production was assessed using DCFDA assay. Data are mean±S.D. (n=3).