



### **Supplementary Figure 1- Heat map for KEGG Mapping to Methane Metabolism**

Heat map for reads abundance counts recruited to different KEGG orthologous groups and belonging to methane metabolism pathway across AT-I, DD-I, KB-UI and KB-L. Frequencies were normalized, log<sub>2</sub> transformed, ordered by hierarchical clustering (Spearman correlation matrix with complete linkage) and scaled.