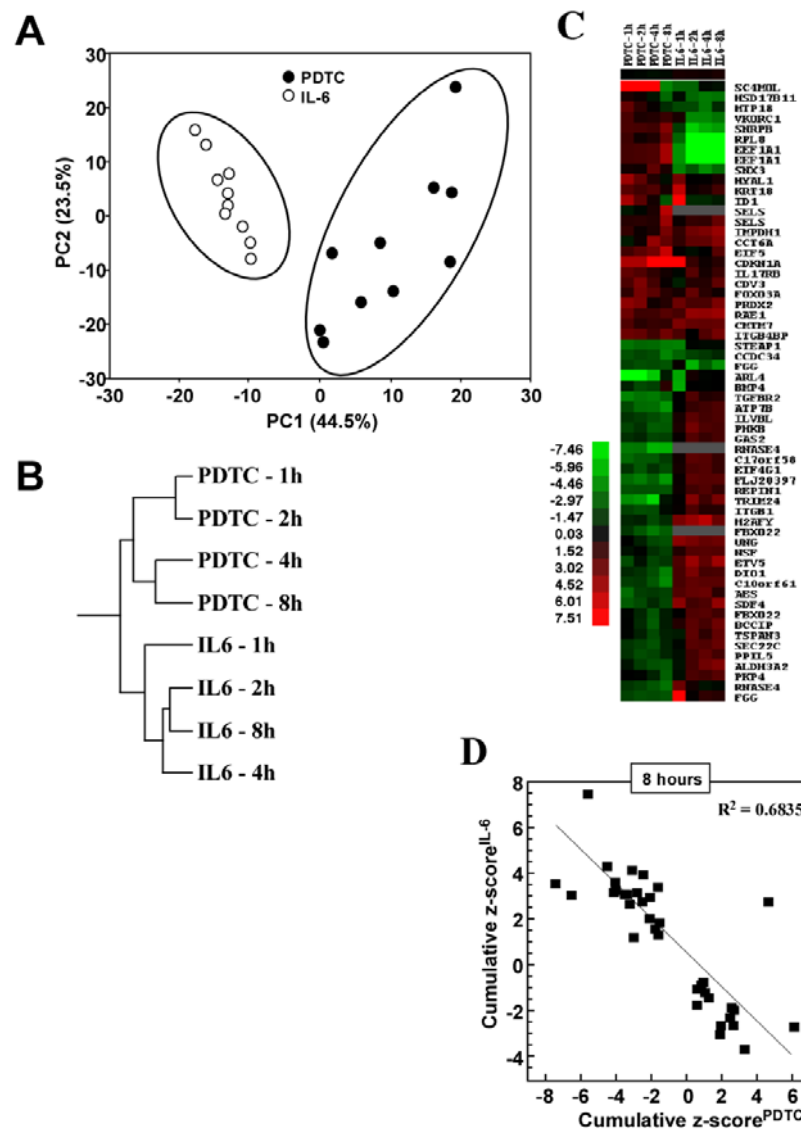


Impact of pyrrolidine dithiocarbamate and interleukin-6 on mTOR complex 1 regulation and global protein translation

Song S, Abdelmohsen K, Zhang Y, Becker KG, Gorospe M, and Bernier M
 J Pharmacol Exp Ther



Supplemental FIG. 1. Divergent global gene expression profiling of HepG2 cells treated with PDTC and IL-6. A, Principal component analysis comparing the gene expression profiles of HepG2 cells treated with PDTC (50 μ M, filled symbols) and IL-6 (20 ng/ml, open symbols) for 1, 2, 4 and 8 h using all the transcriptome data. Each plotted data point represents a single profile. B, Unsupervised hierarchical clustering analysis in each group. C, Heatmaps for a select group of genes whose expression diverged between treatment groups. The color spectrum from green to red indicates low to high expression. HepG2 cells were treated with either PDTC or IL-6 for various times (1, 2, 4 and 8 h) and total RNA was used to produce expression profiles using oligonucleotide DNA microarrays. D, Scatter plot of the cumulative z-scores of shared gene sets ($n=36$) derived from an 8-h treatment with PDTC and IL-6. Cumulative values were derived from the z-scores of the individual genes in each gene set. The changes in expression for each gene set were significant when compared to vehicle control ($P < 0.05$).