

## **Description of Additional Supplementary Files**

### **File name: Supplementary Data 1**

Description: RNAseq raw data and significantly enriched ORA GO terms from dimerizer, arsenite and thapsigargin treated U2OS Dmr-PERK cells.

### **File name: Supplementary Data 2**

Description: RNAseq raw data, significantly enriched ORA GO terms, and class list for genes significantly changed with time with Dmr-PERK activation.

### **File name: Supplementary Data 3**

Description: RNAseq raw data and significantly enriched ORA GO terms for WT vs ATF4 KO U2OS Dmr-PERK cells.

### **File name: Supplementary Data 4**

Description: Metabolites significantly changed with time with Dmr-PERK activation.

### **File name: Supplementary Data 5**

Description: Lipid species abundance over time of Dmr-PERK activation.