

Supplementary Information:

Supplementary Figure 1: Reproducibility in the TIC (Total ion chromatogram) of three technical replicates of both control and cysteine treated cells used in SWATH-MS analysis.

Supplementary Figure 2A: Inconsistency in retention time for any fragment ion across different runs; 2B: Nonspecific XIC ion interference for any specific peptide quantitation; 2C: Comparison of XICs ion intensity ratio with ion intensity ratios obtained from fragment ion library for any specific peptide; 2D: Representative XICs for a particular peptide which has been included in the study.

Supplementary Figure 3: iTRAQ labelling for different experiments

Supplementary Table 1: List of identified proteins at 1% protein global FDR using iTRAQ and ion library for SWATH-MS analysis.