



Figure S8. Acetylation stoichiometry is proportional to abundance-corrected acetylated peptide intensity. (A) Acetylated peptides with high stoichiometry, AcP-insensitive sites (SILAC ratio L/H <2) have a significantly higher median intensity than peptides with low-stoichiometry, AcP-sensitive sites (SILAC ratio L/H >2). The box plots show the distributions of peptide intensities and the fold difference in median intensity is shown, significance was determined by Wilcoxon test. (B) Scatterplot showing the correlation between peptide intensity (I) and AcP-sensitivity (Log2 SILAC ratio L/H). Number (n) of sites analyzed and Spearman's correlation coefficient (ρ) are shown. (C) Acetylated peptides with AcP-insensitive sites have a significantly higher median abundance-corrected intensity (I/A) than peptides with AcP-sensitive sites. The box plots show the distributions of I/A values (based on previously determined protein abundances expressed as copies per cell (Ghaemmaghami et al, 2003)) and the fold difference in I/A is shown. Significance was determined

by Wilcoxon test. **(D)** Scatterplot showing the correlation between I/A and AcP-sensitivity (Log₂ SILAC ratio L/H). **(E)** iBAQ-based abundance-corrected intensity (I/iBAQ-A) provides the best distinction between AcP-insensitive and AcP-sensitive sites. The box plots show the distributions of I/iBAQ-A values and the fold difference in I/iBAQ-A is shown. Significance was determined by Wilcoxon test. **(F)** Scatterplot showing the correlation between I/iBAQ-A and AcP-sensitivity (Log₂ SILAC ratio L/H).