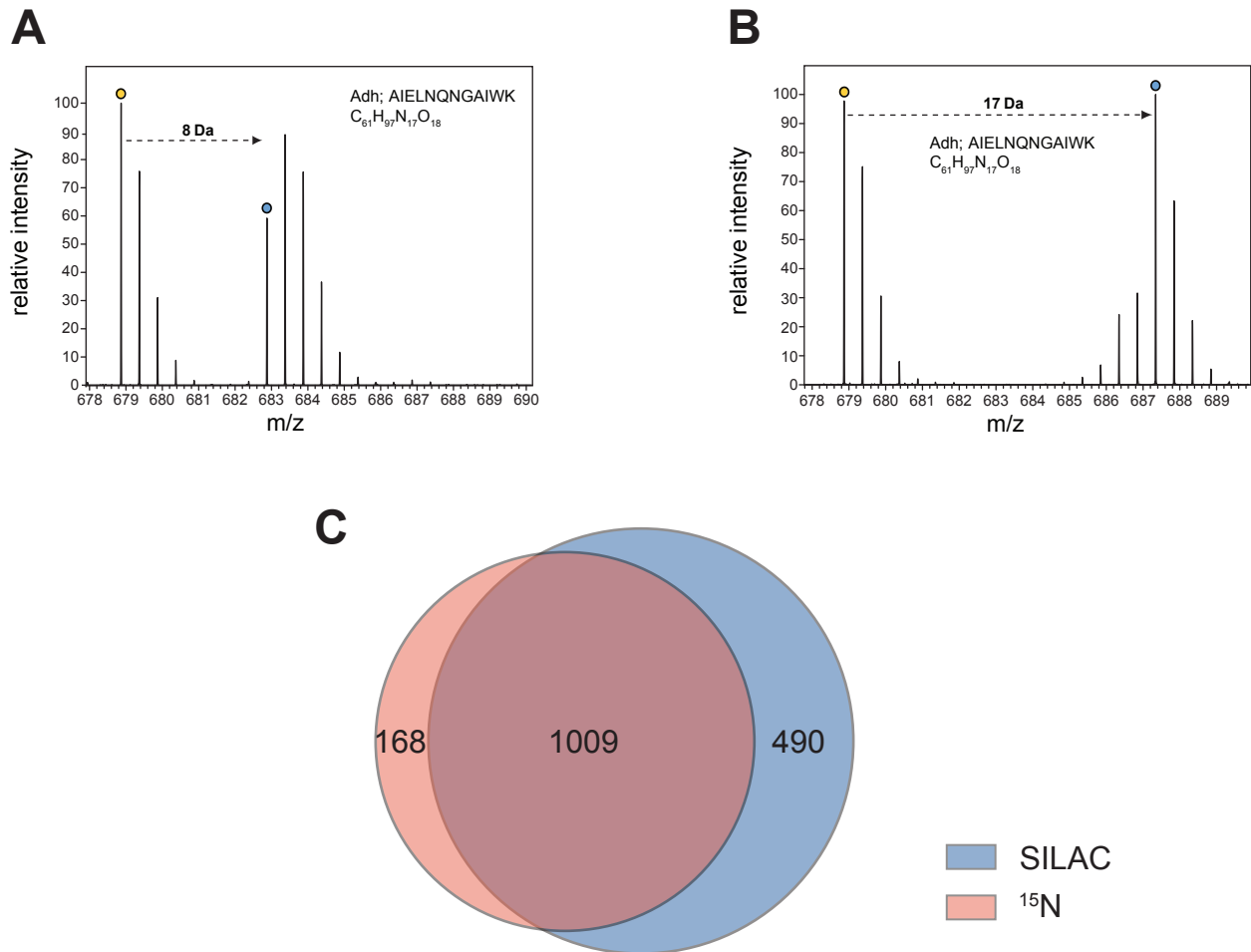


## Figure S2



**Figure S2.** Comparison of SILAC vs. <sup>15</sup>N labeling. *D. melanogaster* larvae were fed either with Lys-8 or <sup>15</sup>N labeled yeast. Proteins were extracted, digested by LysC and peptides were analyzed by LC – MS/MS. **(A, B)** Mass spectra of light and heavy peaks from an alcohol dehydrogenase-derived peptide of mixed light and heavy adult flies in the F<sub>1</sub> generation are shown. Colored dots mark light (yellow) and heavy (blue) monoisotopic peaks. **(A)** The peptide in the heavy SILAC fly has a well-defined isotope cluster and mass shift of 8 Da relative to the light peptide. **(B)** The isotope cluster of the <sup>15</sup>N-labeled peptide is inhomogeneous due to incomplete labeling. The mass shift of 17 Da corresponds to the number of N atoms in this specific peptide. **(C)** Venn Diagram of the number of identified proteins by Mascot using either SILAC or <sup>15</sup>N labeling. (FDR≤1% based on reverse database hits, each).