



**S1 Fig. Stable Isotope Labeling of *E. coli* Diet.** The isotopomer distribution from the  $^{12}\text{C}:^{13}\text{C}$  bacterial mixture demonstrates that there is no mixing of individual carbons between the unlabeled and stable isotope-labeled bacteria as there are no significant isotopomers between the molecular weights (MW) of 299 and 311. The exact ratio of the  $^{12}\text{C}:^{13}\text{C}$  diet is determined for each experiment by comparing the abundance of the exclusively  $^{13}\text{C}$  peaks (MW: 312-314) to the  $^{12}\text{C}$  peaks (MW: 296-298). Data from 18 experiments with SEM shown.