

**Data S1. Deuterium uptake plots comparing relative deuterium levels measured for the wild-type DENV2 sE (black circles) and sE-M196V (red squares), DENV sE-M272S (blue squares), and DENV sE-Q52A (green squares).** Plots for all peptides followed in the hydrogen-deuterium exchange (HDX) mass spectrometry comparisons are shown. The residues of each peptide are shown in the top left of each graph. Plots are listed from N-to-C from left to right and the maximum on the y-axis of each plot is the theoretical amount of deuterium that could be exchanged into backbone amide positions of each peptide. The final 7 plots are for peptides found only in the mutant constructs of sE. Plots are scaled for visualization and continue on the next four pages.











