

**Figure S1.** (A) Overall computational workflow of *Eris* scans for stabilizing mutants of  $\mu$ -OR. For destabilizing mutations, *Eris* looks for positive  $\Delta\Delta G$  values. (B) An example of converged distribution of  $\Delta\Delta G$  values between multiple *Eris* runs. The converged average  $\Delta\Delta G$  and standard deviations were reported for each mutation.