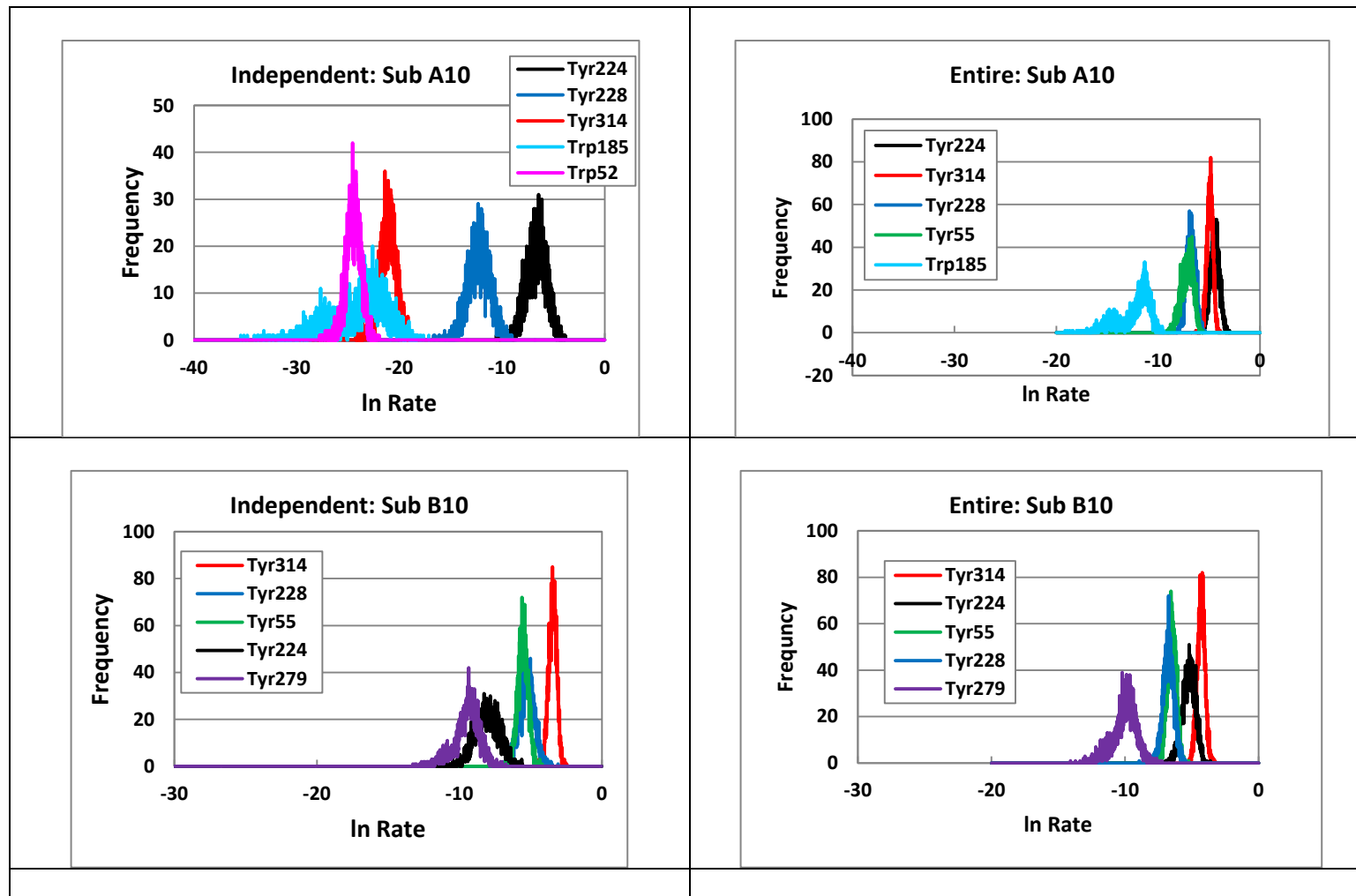


Figure S1 Dynamics of intersubunit structure.

Left column shows dynamics of Rc between Iso in Sub A and Iso in Sub B (upper) and inter-Iso angle (lower). Right column shows distributions of these geometrical factors. 10 and 30 in the inserts denote 10 °C and 30 °C.



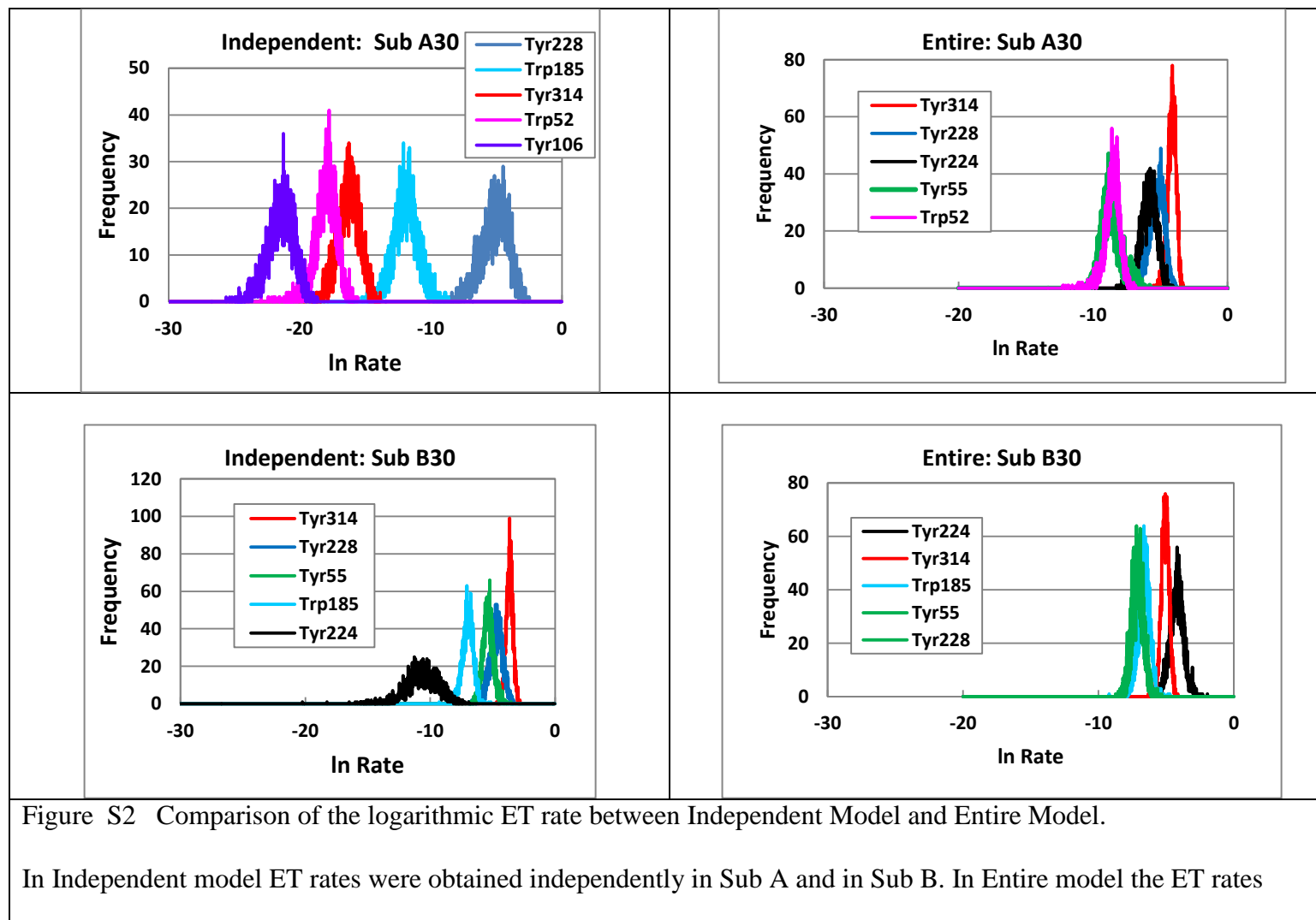
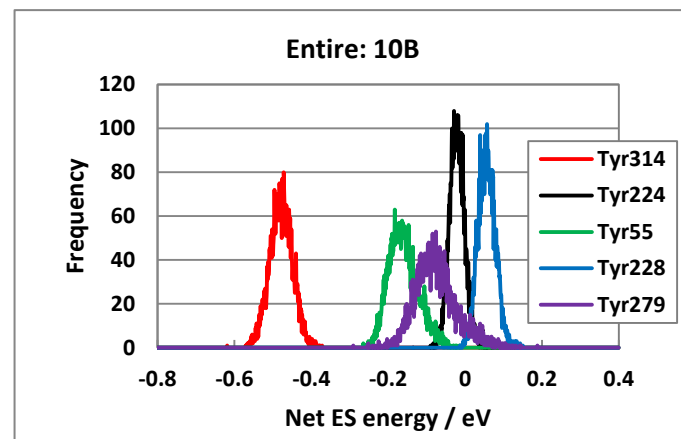
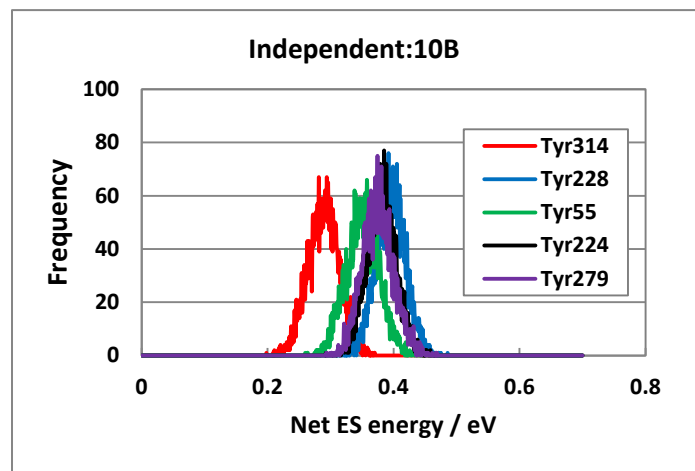
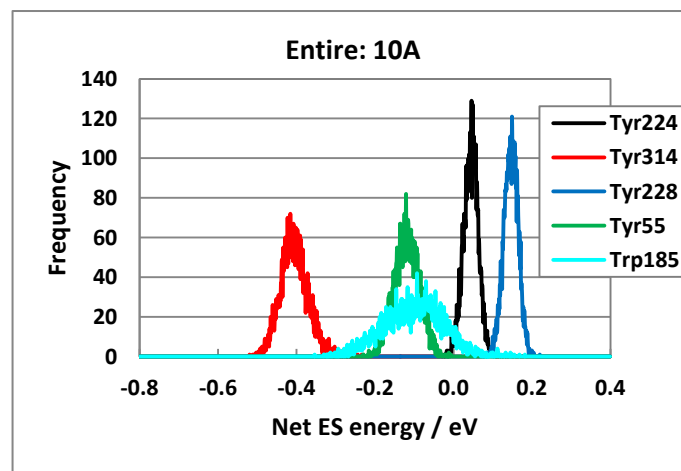
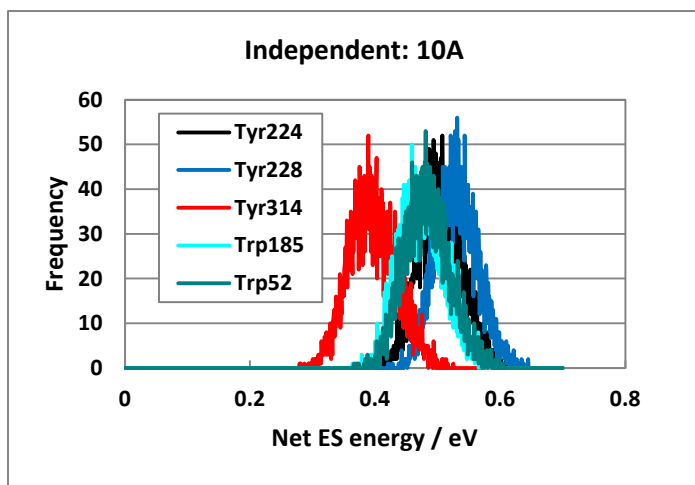


Figure S2 Comparison of the logarithmic ET rate between Independent Model and Entire Model.

In Independent model ET rates were obtained independently in Sub A and in Sub B. In Entire model the ET rates

were obtained for the entire dimer. Sub A10 and Sub B10 denote Sub A and Sub at 10 °C, and Sub A30 and Sub B30, Sub A and Sub B at 30 °C, respectively. Inserts show amino acids with top fastest ET rates.



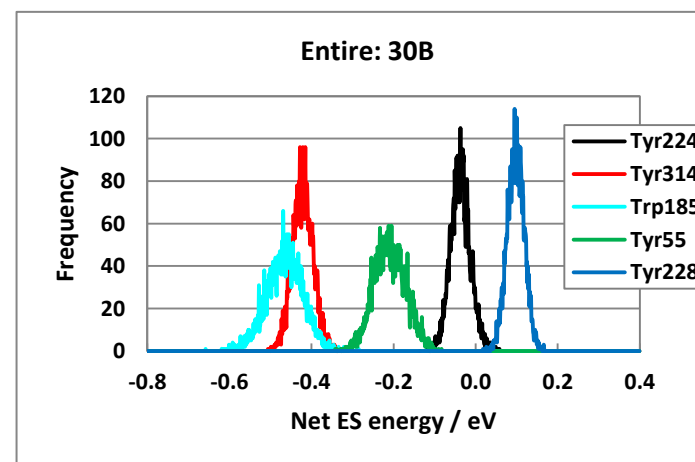
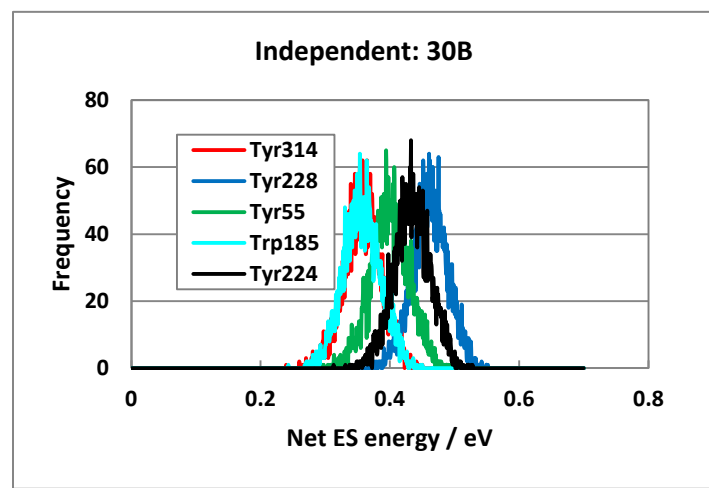
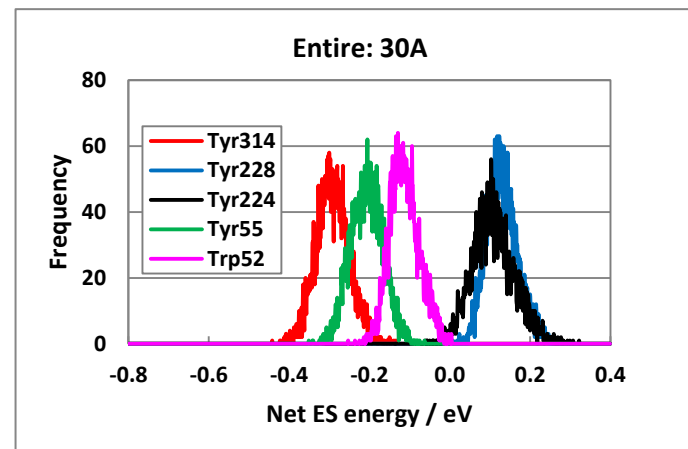
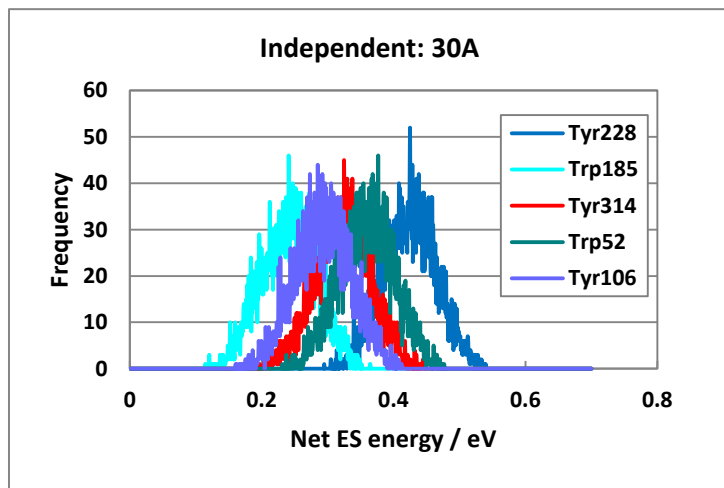


Figure S3 Effect of subunit structure on the Net ES energy in DAAO dimer.

In Independent model the Net ES energies were obtained independently in Sub A and in Sub B. In Entire model the Net ES energies were obtained for the entire dimer. Sub A10 and Sub B10 denote Sub A and Sub at 10 °C, and Sub A30 and Sub B30, Sub A and Sub B at 30 °C, respectively. Inserts show amino acids with top fastest ET rates.

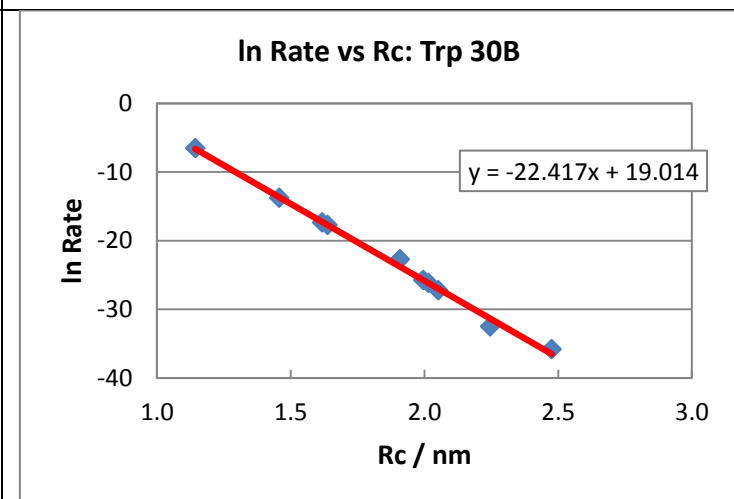
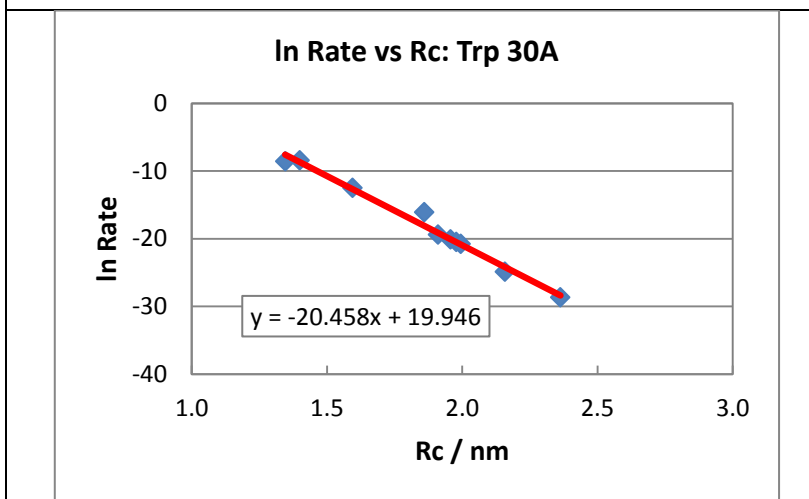
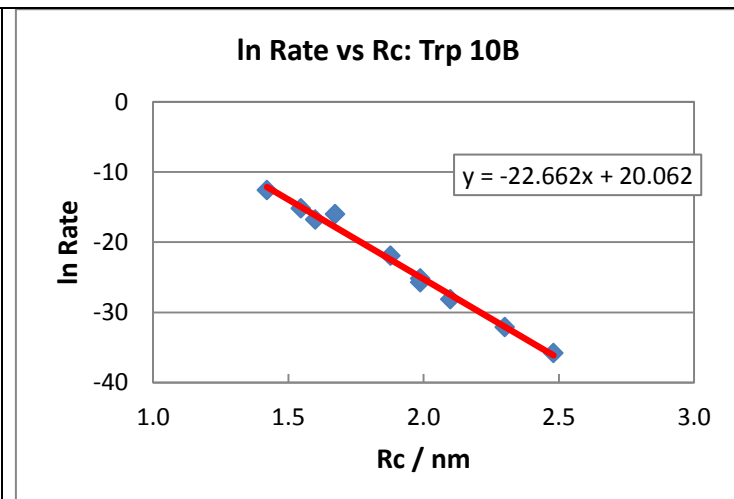
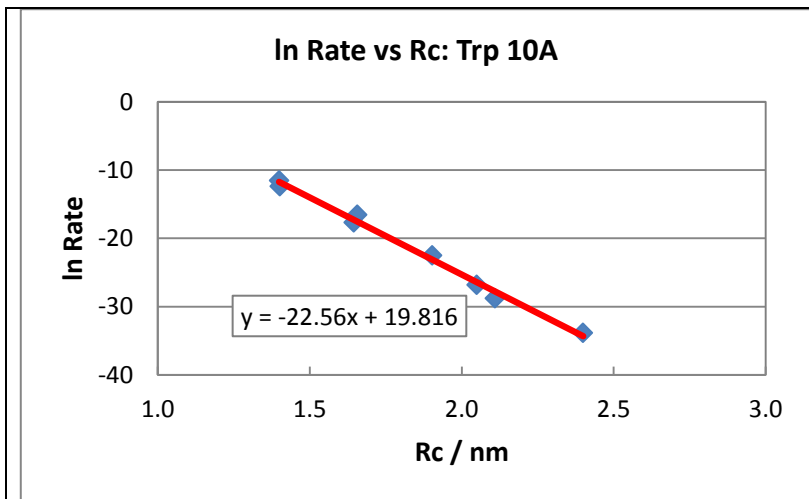


Figure S4 Dutton law for Trp in DAAO.	
All Trps were taken into account. Inserts indicate approximate linear functions.	

