

Title: Supplementary Movie 1

Description: Movies of molecular dynamics for AdhE dimer, AdhE hexamer, BdhE dimer, and BdhE tetramer. Movies for Run 1 in the three replication experiments are provided.

Title: Supplementary Data 1

Description: Multiple sequence alignment of BdhE, AdhE, and sister-clade single domain families of them.

Title: Supplementary Data 2

Description: Multiple sequence alignments used for gene phylogeny reconstructions of ALDH-containing proteins and

Title: Supplementary Data 3

Description: Multiple sequence alignments used for gene phylogeny reconstructions of ADH-containing proteins