

Supplementary figures

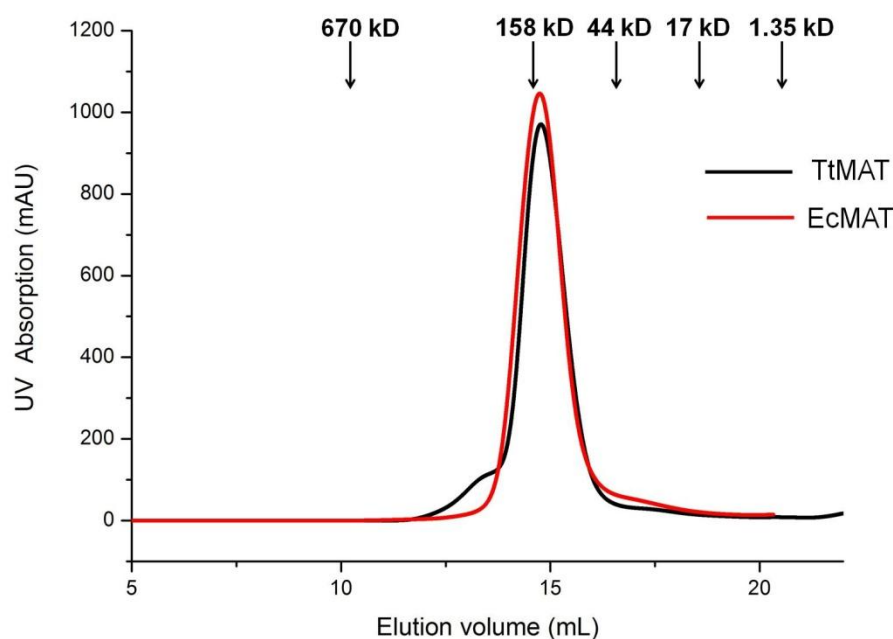


Fig. S1 TtMAT forms a tetramer in solution as EcMAT. The gel filtration profile of TtMAT and EcMAT on Superdex-200 column is shown. The sizes of the molecular markers are marked on top of the peaks.

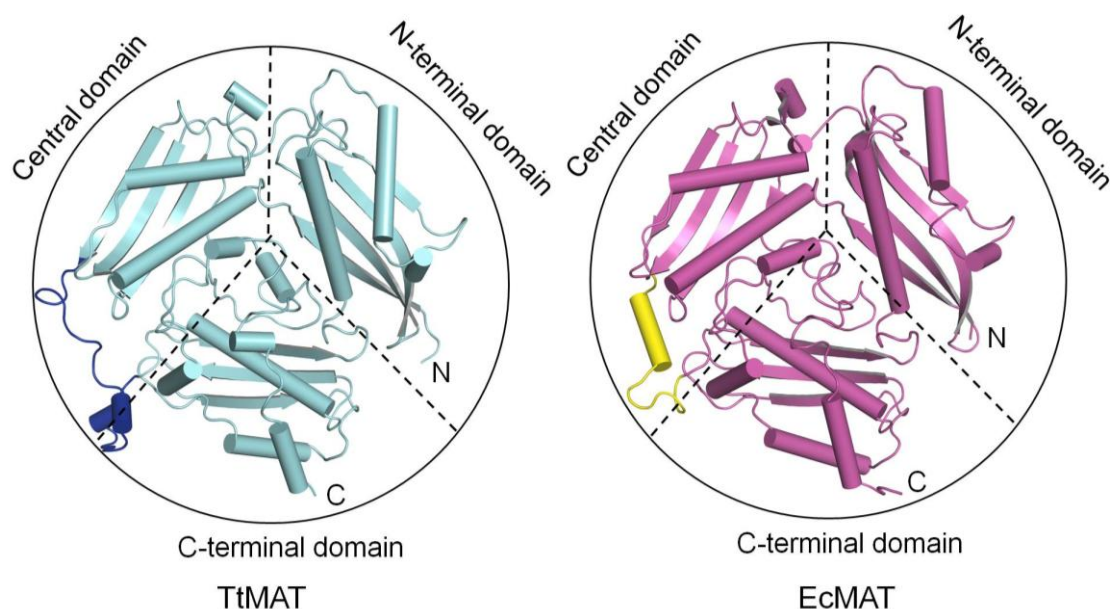


Fig. S2 Domain organizations of TtMAT and EcMAT (PDB code: 1RG9). Both proteins are shown in cartoon model. The N- and C-termini are indicated. The flexible

loop region is colored blue (in TtMAT) and yellow (in EcMAT), respectively.

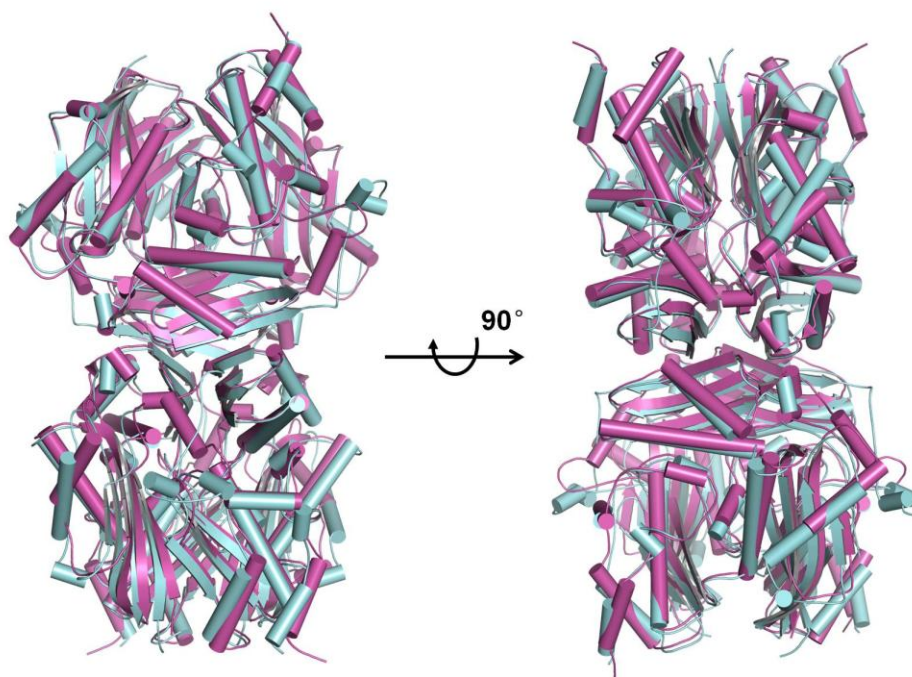


Fig. S3 Superimposition of TtMAT with EcMAT (PDB code: 1RG9). Both proteins are shown in cartoon model, and colored cyan (TtMAT) and magenta (EcMAT), respectively.

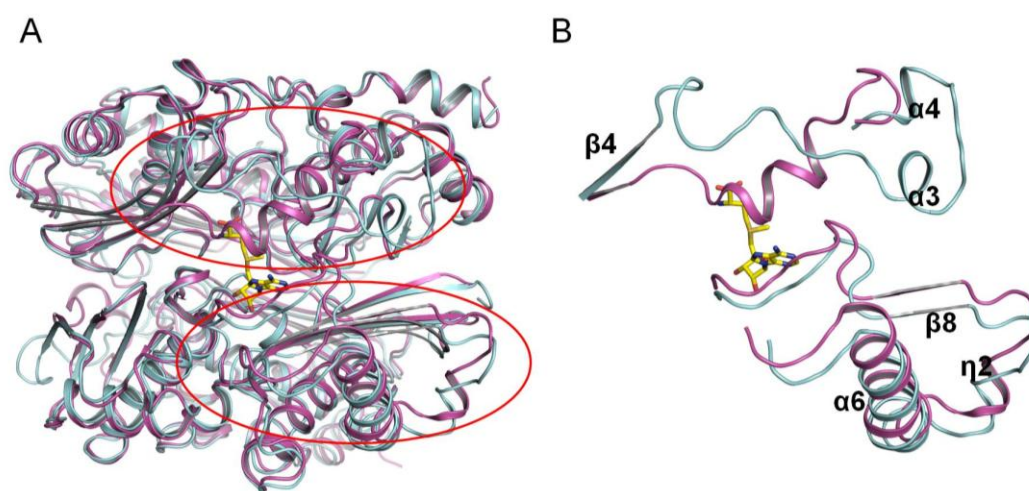


Fig. S4 Different conformations of the entrance to the active site in TtMAT and EcMAT (PDB code: 1RG9). (A) The structures of TtMAT and EcMAT are superimposed together, colored cyan (TtMAT) and magenta (EcMAT), respectively. The SAM product in EcMAT is shown in sticks. The regions undergoing movement

are marked with circles. (B) A closer view of the entrance to the active site of a dimer structure. Shown are only the major region in different positions between TtMAT and EcMAT. The secondary structure labels in TtMAT are marked in the structure.

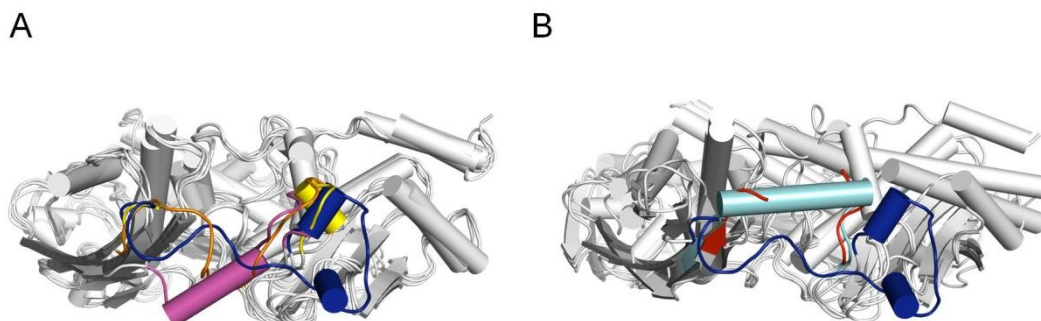


Fig. S5 Comparison of the flexible loops in TtMAT and other solved structures.

(A) Structure of TtMAT, open (PDB code: 1XRB and 1FUG) and closed confirmations (PDB code: 1RG9) of EcMAT are superimposed together. Only the flexible loop regions are colored separately, blue (TtMAT), yellow (1XRB), magenta (1RG9) and orange (1FUG). (B) Structure of TtMAT, TkMAT (PDB code: 4L4Q) and SsMAT (PDB code: 4HPV) are superimposed together. Only the flexible loop regions are colored separately, blue (TtMAT), cyan (4L4Q), and red (4HPV).