## Engineered tryptophan in the adenine binding of catalytic subunit A of the A-ATP synthase demonstrates the importance of aromatic residues in adenine binding, forming

## a tool for steady state and time-resolved fluorescence spectroscopy

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## Supplementary figure legend

**Figure S1:** Overlap of crystallographic structures of F427W mutant (*green*; PDB 3SDZ) with WT-A subunit (*orange*; PDB 3I72; Kumar *et al.*, 2010). An insert showing the flattened P-loop (G234-T241) in F427W mutant making a drift of around 6.8 Å in comparison to the arched conformation of the P-loop in WT-A. The drift was measured between the C $\alpha$  atoms of G237 residue.

**Figure S2:** Structural overlap of AMP-PNP binding region within 5 Å in AMP-PNP bound structure of WT-A (yellow; PDB 3I4L; Kumar *et al.*, 2010) with F508W (*cyan*, PDB 3SEO) mutant structure of subunit A. The AMP-PNP molecule is shown as spheres (wheat colour). The mutated residue in F508W mutant is labelled as asterisk (\*). For clarity the residues of AMP-PNP bound structure of subunit A are labelled.

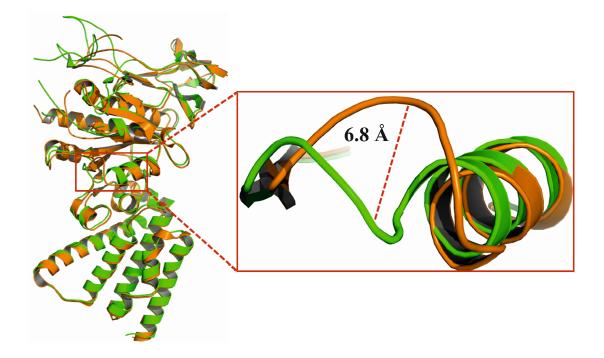


Figure S1

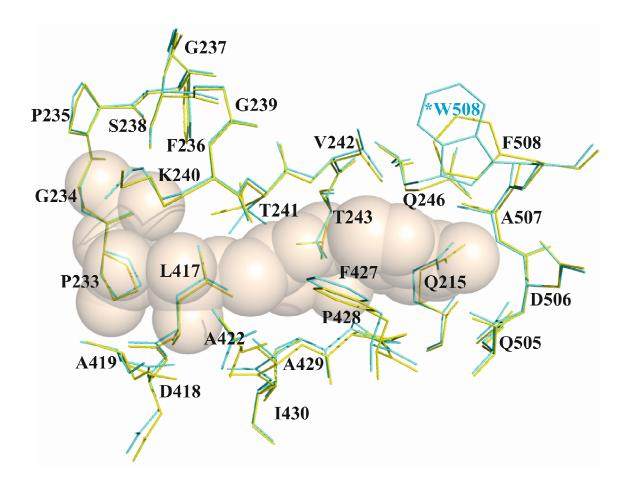


Figure S2