

## Supplementary for: Chemical chaperone induces inhomogeneous conformational changes of flexible proteins

Figure S1. Observed rate constants (inset) and number of cysteine labelled for each kinetic phases determined from the Stopped-flow experiments of cysteine labelling of TrmFO<sup>Y346F</sup> by DTNB.

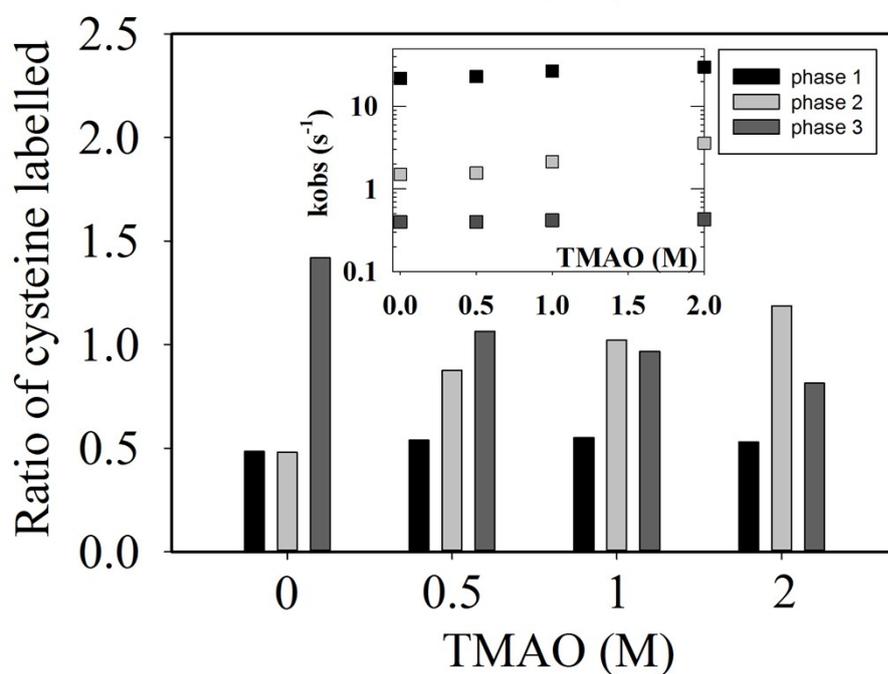
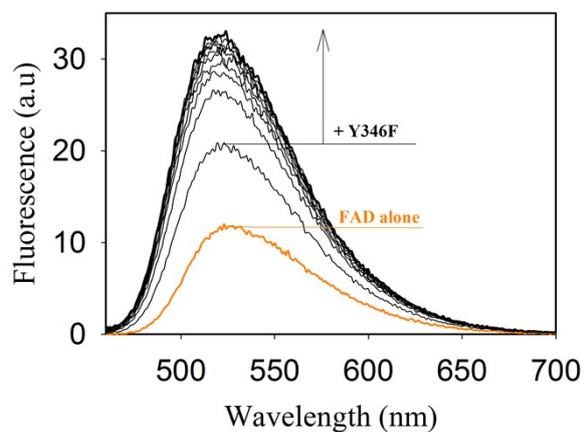
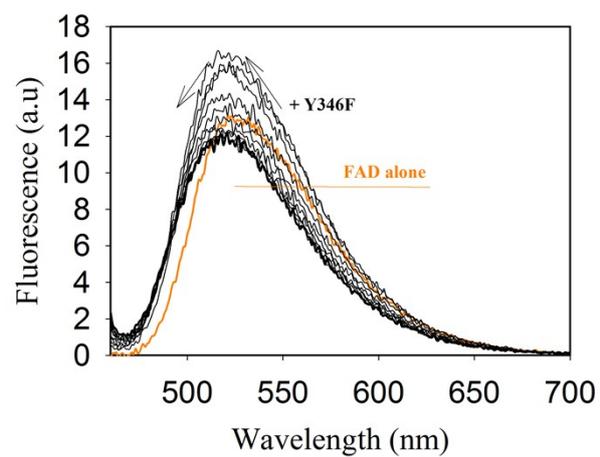


Figure S2. Fluorescence emission of FAD in presence of increasing concentration of TrmFO<sup>Y346F</sup> in the absence of TMAO (A) and in the presence of 1 (B) and 2 M (C) TMAO, respectively.

A.



B.



C.

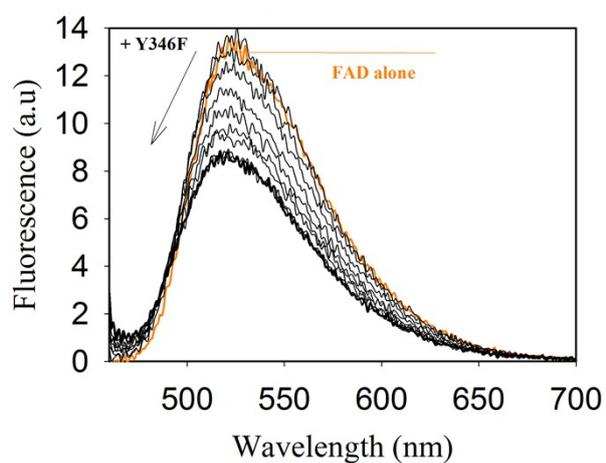


Figure S3. Lehrer's plots for the KI quenching experiments of the FAD in the reconstituted holoprotein of TrmFO<sup>Y346F</sup> (FAD/apoprotein = 1 $\mu$ M / 10 $\mu$ M), in the absence and the presence of 2 M TMAO.

***Quenching of FAD fluorescence of the holo-Y346F protein by KI***

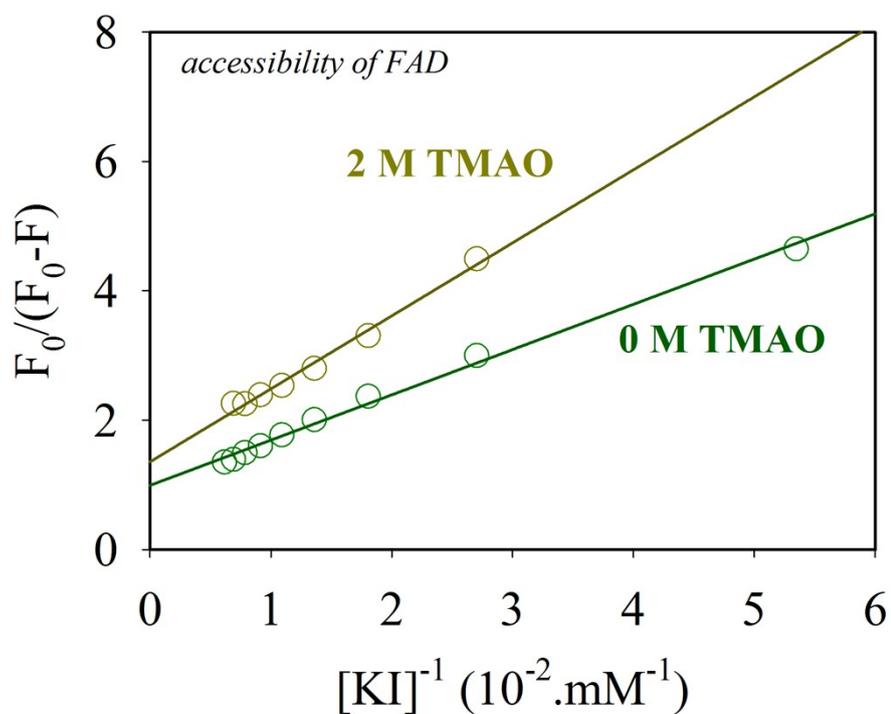
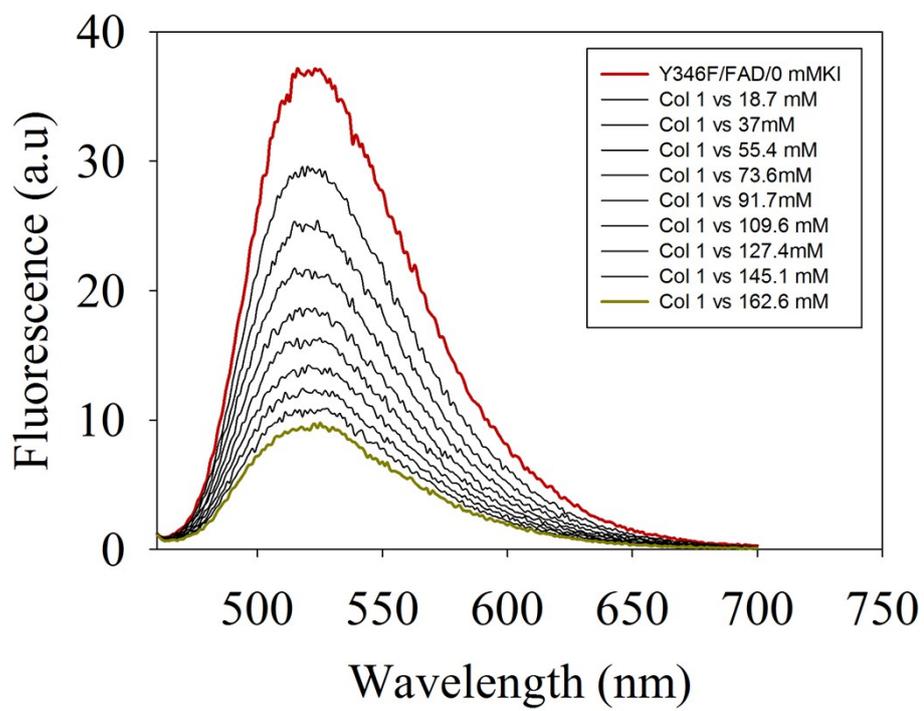


Figure S4. Effect of TMAO on the thermodynamic of FAD binding to TrmFO<sup>Y346F</sup>

