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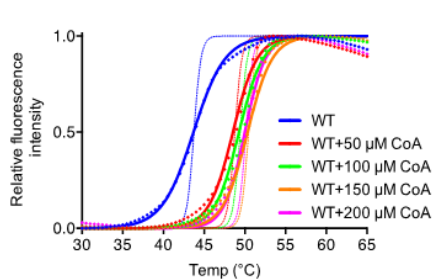
**Supporting information for article:**

**Biochemical and structural studies of mutants indicate concerted movement of the dimer interface and ligand-binding region of *Mycobacterium tuberculosis* pantothenate kinase**

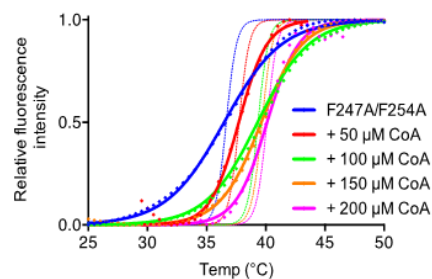
**A. Paul, P. Kumar, A. Surolia and M. Vijayan**

**Table S1** Primers used for generation of mutants

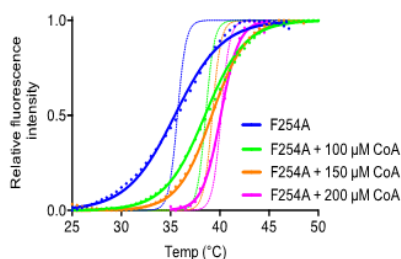
Mutant	Primers
<b>F254A/F247A</b>	5' GTGGGCGTGTGATTCCGGATCCGCGGCCCGCCGTGGT3' 5' ACGGCGGCCGCGGATCCGGAATCACACGCCAC 3'
<b>F254A</b>	5' GCGTTCGCGGATCCGGAATCACACGCGCACCAC 3'
<b>F247A</b>	5' CGCACCACGGCGGCCGCGGATCCGGAATCACAC 3'



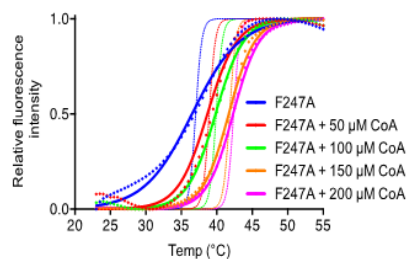
(a)



(b)

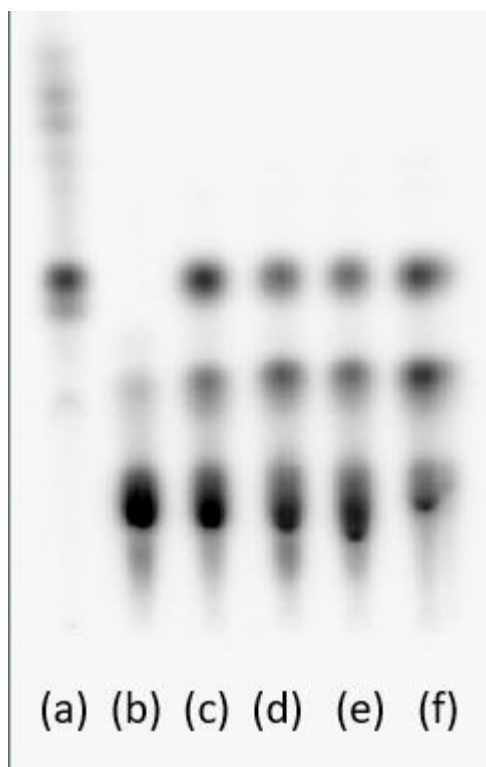


(c)

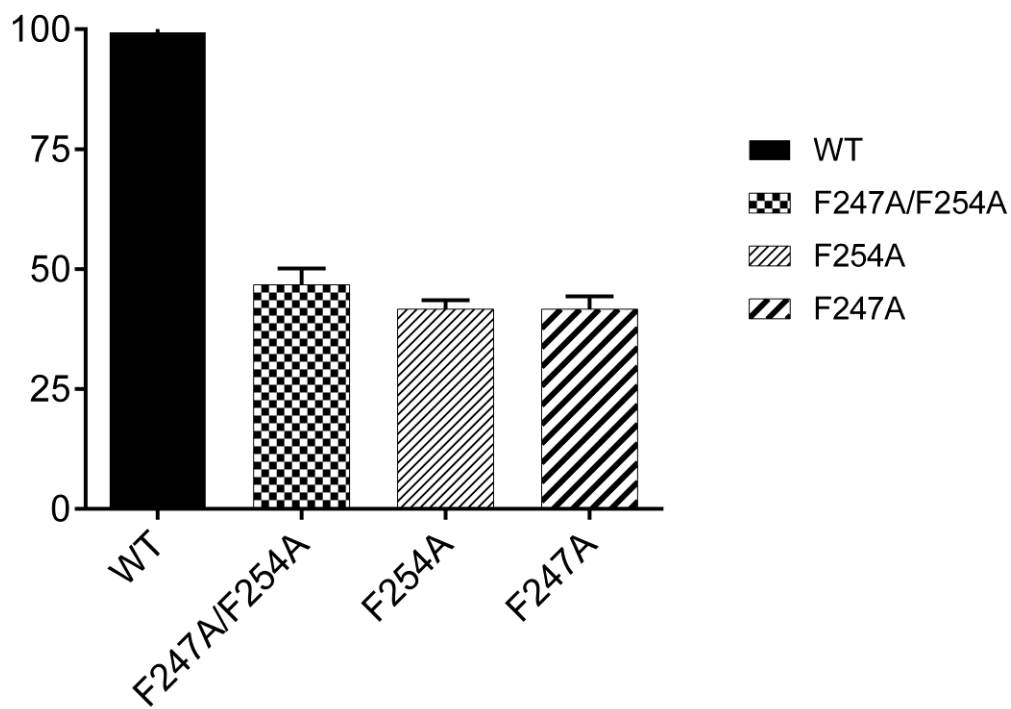


(d)

**Figure S1** Thermal shift assay to estimate thermal stability and monitor CoA binding to wild-type and mutant *MtiPanK* proteins. The mutants exhibit reduced stability and limited binding to CoA as compared to the wild-type protein.



**Figure S2** An autoradiogram of a TLC plate that was loaded with the supernatant of the reaction mixtures of *MtPanK* and the mutants and resolved in butanol: acetic acid: water (5:2:4) solvent system. Lane (a)  $1\text{-}^{14}\text{C}$  pantothenate. Lane (b)  $[\gamma\text{-}^{32}\text{P}]\text{-ATP}$ . Lanes (c-f) show formation of  $[\gamma\text{-}^{32}\text{P}]\text{-phosphopantothenate}$  from  $[\gamma\text{-}^{32}\text{P}]\text{-ATP}$  and pantothenate by *MtPanK*, the double mutant, F254A and F247A mutants respectively.



**Figure S3** Relative activity of the mutants with respect to wild type *MtPanK* measured using coupled assay.