Supporting information for

A FLUORESCENT, REAGENTLESS BIOSENSOR FOR ADP BASED ON TETRAMETHYLRHODAMINE-LABELED PARM

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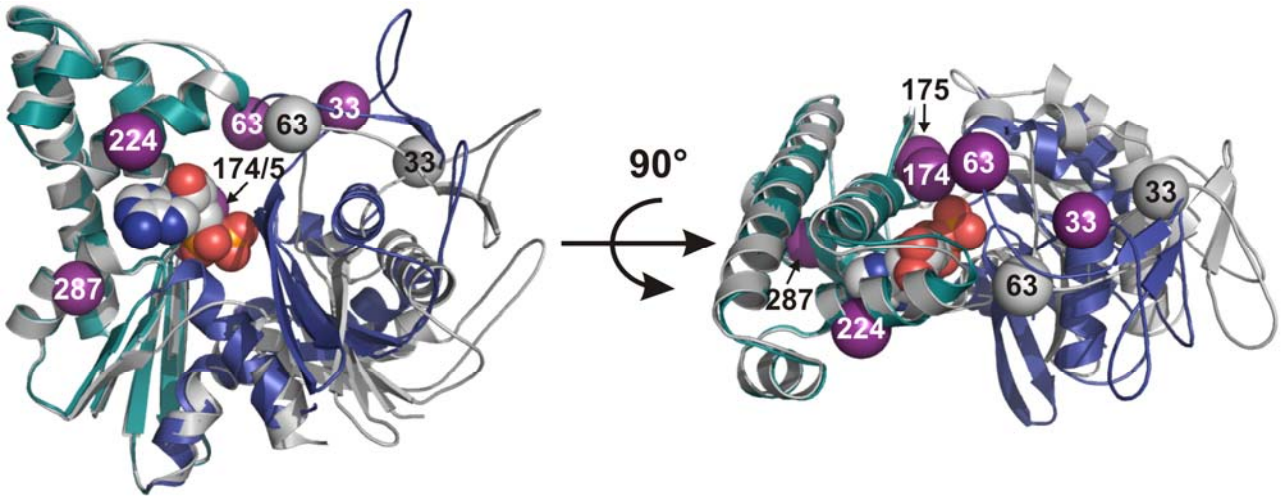
Figure S1: ParM conformational changes on ADP binding**.**

Superposition of the ParM apo structure (gray, PDB entry 1MWM) and the ADP bound ParM structure (subdomain I in blue and subdomain II in cyan, PDB entry 1MWK) showing the domain rotation upon ADP binding (1). The two structures were superimposed on subdomain II (residues 166-305, cyan). The positions of mutations in the final biosensor, 5-ATR-ParM (K33A/D63C/T174A/T175N/D224C/C287A), are shown as purple and gray spheres in the ADP bound and apo structure, respectively. Two tetramethylrhodamine dyes were covalently attached to the cysteines at positions 63 and 224 via iodoacetamide coupling.



1. van den Ent, F., Moller-Jensen, J., Amos, L. A., Gerdes, K., and Lowe, J. (2002) F-actin-like filaments formed by plasmid segregation protein ParM, *EMBO J. 21*, 6935-43.