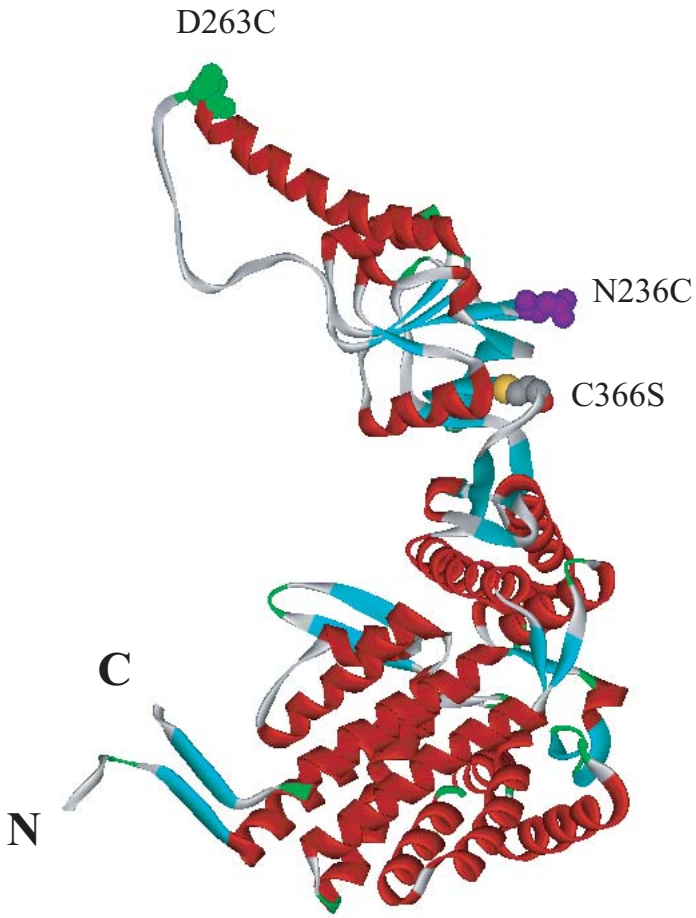
Supplementary Figure 1



Location of amino acids mutated for fluorescence assays

The mutated residues at the tip and bottom of helical protrusion for label with fuorophores, D263 and N236, and one innate cysteine residue, C366, were shown as CPK style within subunit structure.

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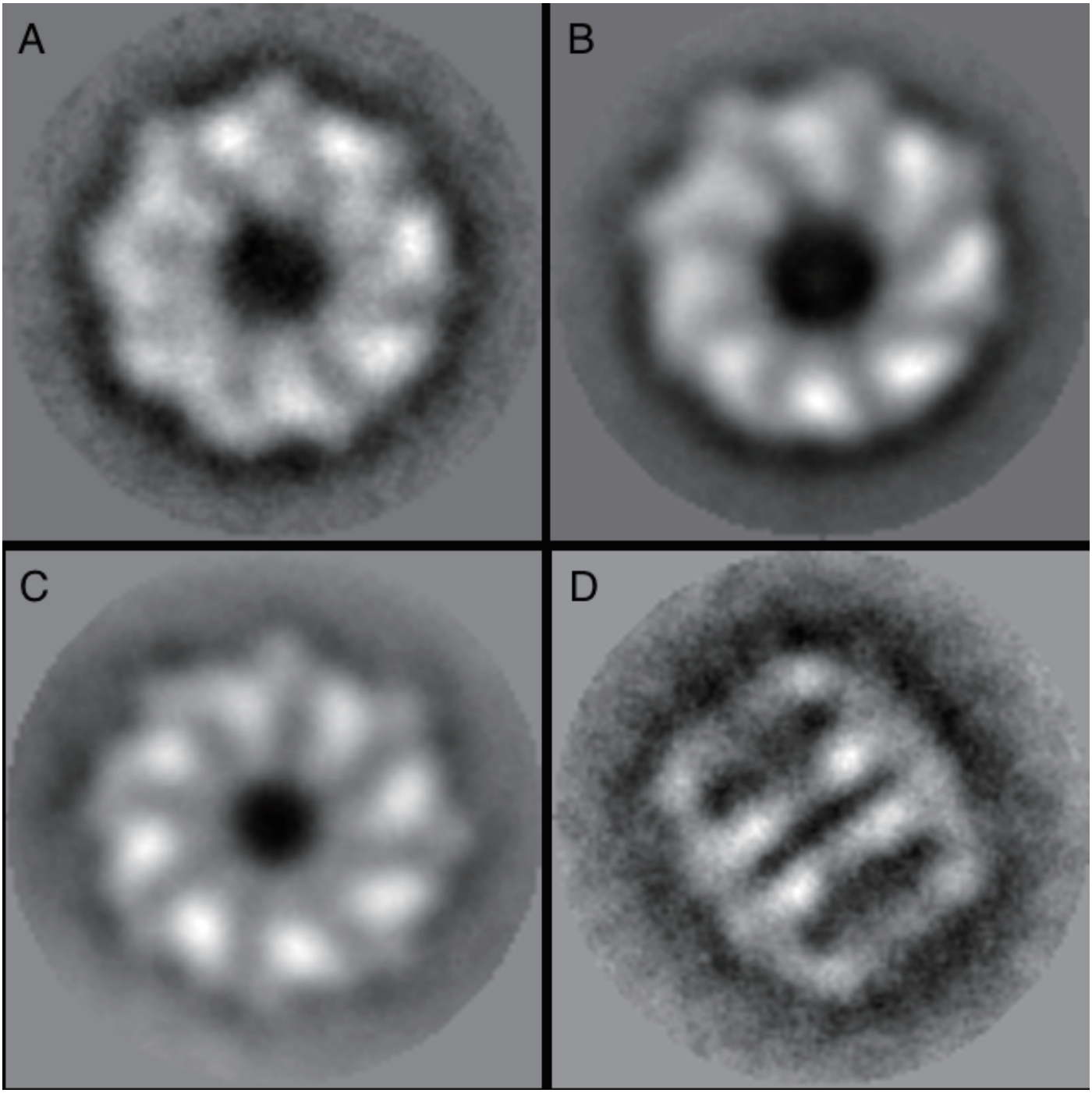
Supplementary Figure 2



Electron Microscopic Images of CpnWt, CpnΔhelical and Cpn(WH)$_8$

For electron microscopy, 5 µl aliquots of the various thermosome samples (CpnWt, CpnΔhelical and Cpn(WH)$_8$) were applied to glow-discharged carbon grids for 1 min. and then we stained them for 1 min with 2% (w/v) uranyl acetate. Images were recorded at 0º tilt in a JEOL 1200EX-II electron microscope operated at 100 KV and recorded on Kodak SO-163 film at 60,000X nominal magnification. Micrographs were digitized in a Zeiss SCAI scanner with a sampling window corresponding to 3.5 Å/pixel and two-dimensional classification and averaging was performed using maximum -likelihood procedures (Scheres, S. H. W., et al. (2005) J. Mol. Biol. 348, 139–149).

(A) Average image (232 particles) of the end-on view of CpnWt. (B) Average image (698 particles) of the end-on view of CpnΔhelical. (C) Average image (673 particles) of the end-on view of Cpn(WH)$_8$. (D) Average image (479 particles) of the side view of CpnWt.

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