Supporting Information for

Structural consequences of hereditary spastic paraplegia disease-related mutations in kinesin

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Head+ MT complex   **Head in solution**

Figure S1. Free energy (ΔG) profiles for the mutations of 280Arg to Ser (A and B), 253Lys to Asn (C and D), 256Asn to Ser (E and F), 60Glu to Val (G and H). $\left\langle \frac{\delta H}{\delta \lambda} \right\rangle_{\lambda}$ values are plotted as a function of λ when the head is bound to the MT (A, C, E, G) and when the head is free in solution (B, D, F, H) for four independent simulations (Black, Red, Blue and Green). The error bars represent statistical errors.