

SUPPLEMENTARY ONLINE DATA

Structural and biochemical characterization of the KLHL3–WNK kinase interaction important in blood pressure regulation

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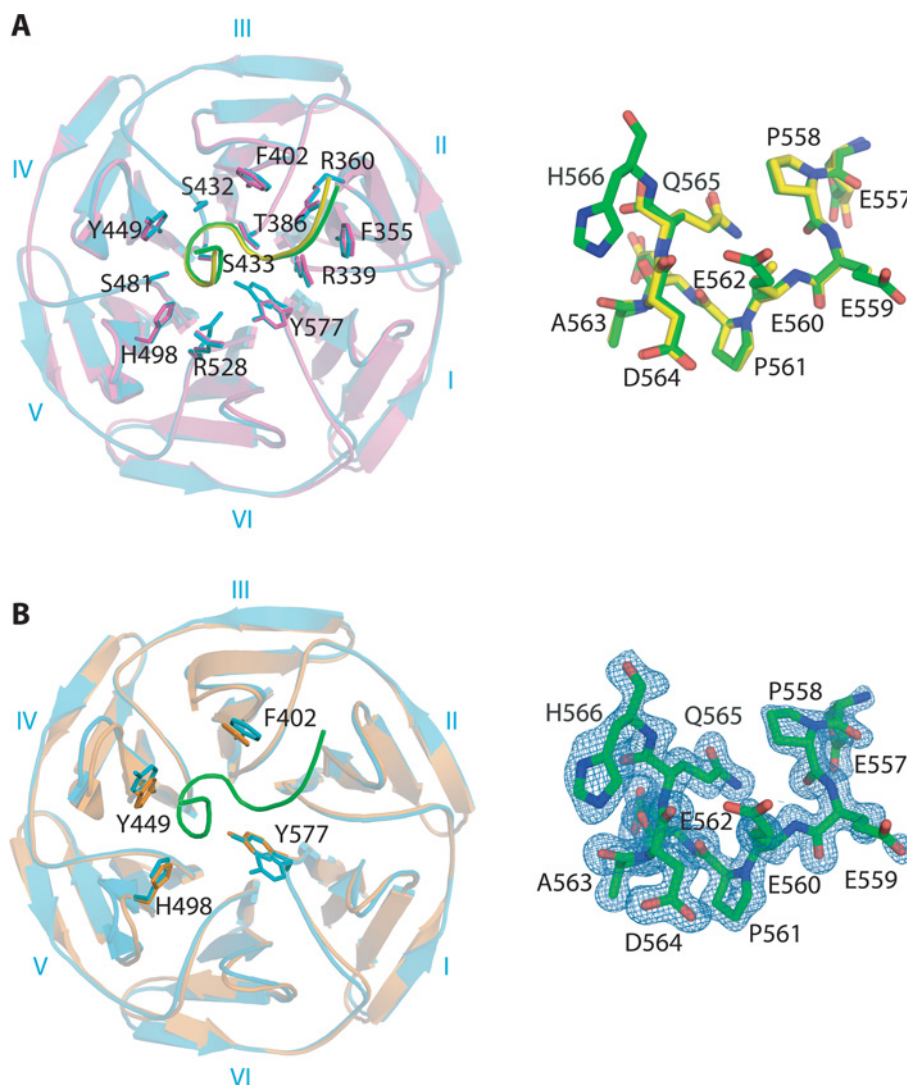


Figure S1 KLHL2–WNK4 peptide complex

(A) Superimposition of the crystal structures of KLHL2–WNK4 (blue with green peptide) and KLHL3–WNK4 (pink with yellow peptide) reveals the similarity between the two complexes. The key contact residues are labelled (left panel). Multiple conformations are visible for Arg⁵²⁸ and Tyr⁵⁷⁷ in the KLHL2 structure. His⁵⁶⁶ and the side chains from Glu⁵⁵⁹ and Glu⁵⁶⁰ of WNK4 are traceable in the KLHL2 structure, but are absent in the KLHL3 structure (right-hand panel). (B) Comparison of the apo (orange, PDB code 2XN4) and WNK4-bound structures of KLHL2 (blue) reveals the rigidity of the Kelch β -propeller and peptide-binding site. Electron density for the bound peptide is shown on the right-hand panel.

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The structural co-ordinates reported for KLHL2 and KLHL3 will appear in the PDB under codes 4CHB and 4CH9 respectively.