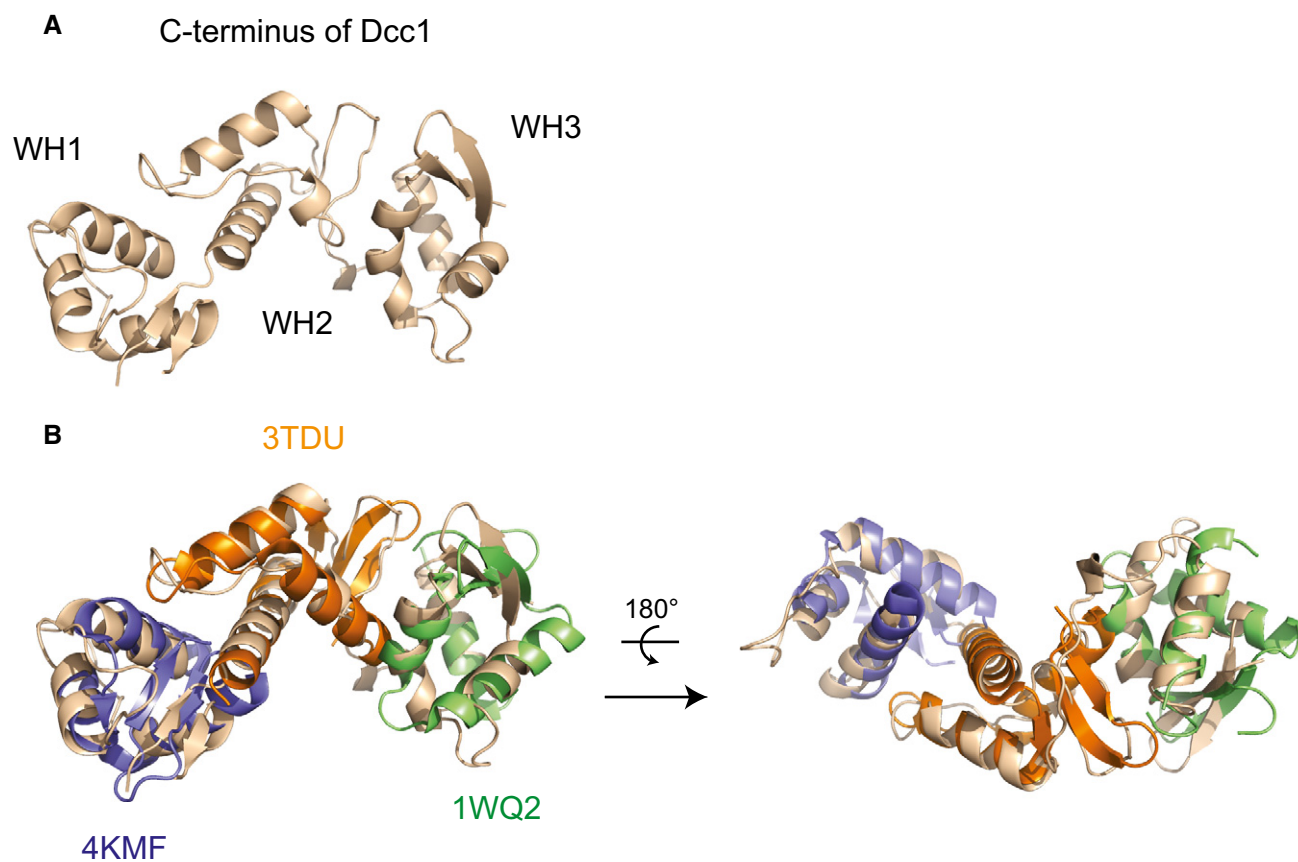


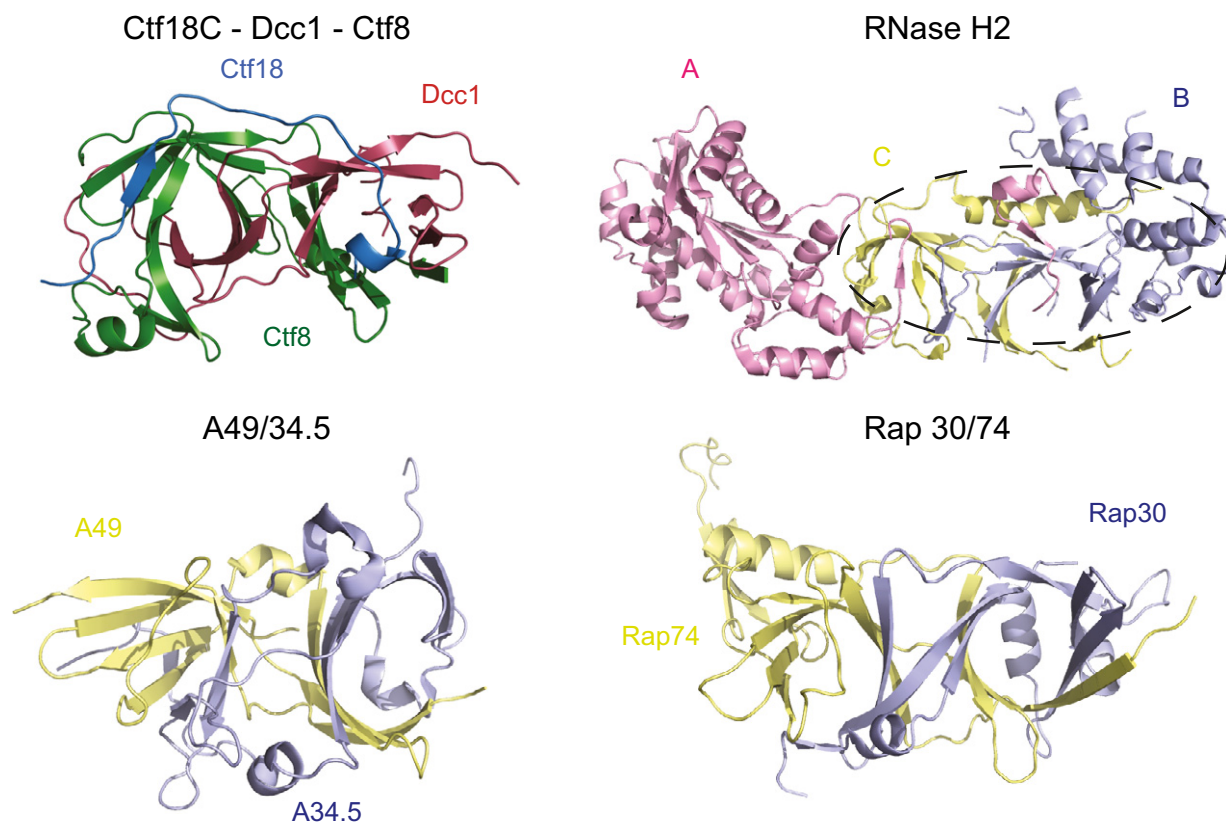
## Expanded View Figures



**Figure EV1. Structural alignments of the Dcc1 C-terminus with other WH domains.**

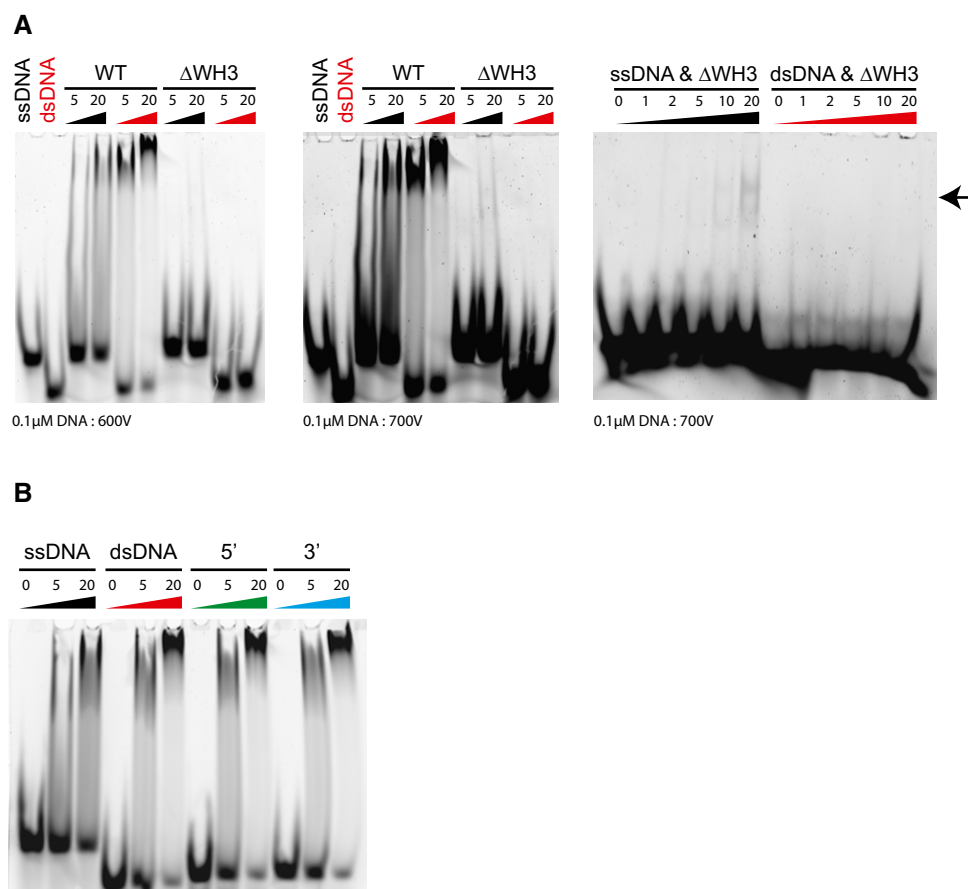
A The Dcc1 C-terminus is shown in brown and indicated are the WH domains.

B Dcc1 C-terminus is shown in the same orientation as (A) and a structural alignment with three proteins containing WH domains, PKZ (PDB ID: 4KMF, blue), cullin-1 (PDB ID: 3TDU, orange) and DsrD (PDB ID: 1WQ2, green).



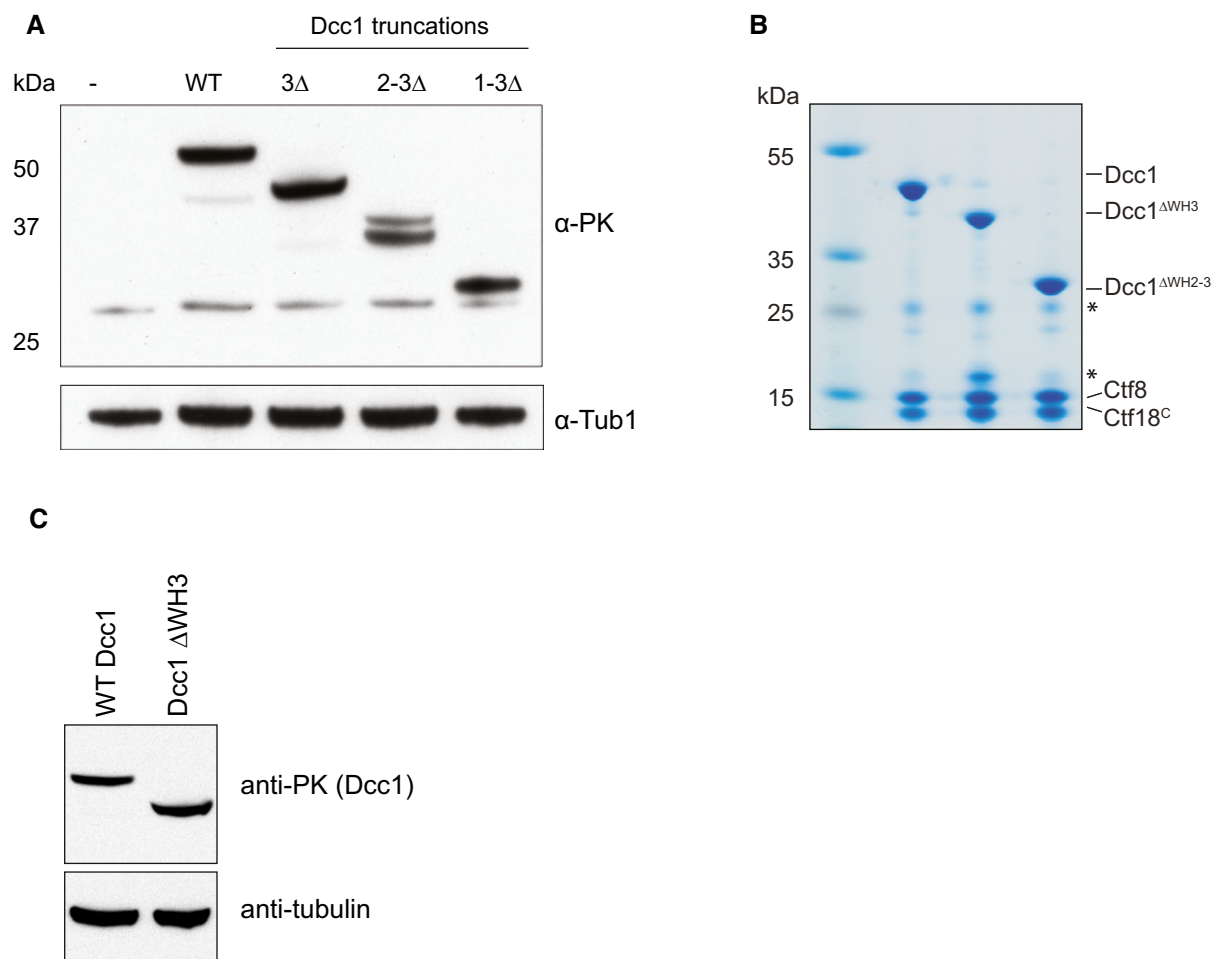
**Figure EV2. Similar 'triple  $\beta$ -barrel' dimerisation folds.**

RNase H2 complex (3PUF), A49/34.5 (3NFG) and Rap30/74 (1F3U) are presented for comparison with the heterotrimer Ctf18<sup>C</sup>-Dcc1-Ctf8. The dotted line indicates the area of structural similarity to the Ctf18<sup>C</sup>-Ctf8-Dcc1 structure.



**Figure EV3. Additional DNA binding and functional analyses.**

A DNA EMSA showing residual binding to ssDNA (indicated by arrow) but not dsDNA by the WH3-deleted Dcc1 construct. Protein concentrations are given in  $\mu\text{M}$ .  
 B DNA EMSA showing binding of Dcc1<sup>90-380</sup> to 18-bp substrates containing 7-bp 5' or 3' overhangs. Protein concentrations are given in  $\mu\text{M}$ .



**Figure EV4. Expression of and complex formation by Dcc1 WH deletions.**

- A Western blot showing cellular expression levels of PK-tagged Dcc1 deletions employed for checkpoint activation and sister chromatid cohesion assays. Tubulin is shown as a loading control.
- B SDS-PAGE gel of purified recombinant Dcc1-Ctf8-Ctf18<sup>C</sup> complexes containing indicated Dcc1 deletions. Protein complexes shown were purified in the same way as samples for crystallisation studies. Asterisks indicate impurities in the sample.
- C Western blot showing cellular expression levels of Dcc1 deletion employed for CHIP analysis.