



Supplementary Fig. S2

Supplementary Figure S2. Key interactions between distinct residues in the IL3R ternary complex crystal structure. **A**, Key interactions between IL3 and IL3R α at Site 1. **B**, Site 2 (i.e. interactions between IL3 and β c, top) and Site 3 interactions (i.e. between IL3R α and β c, bottom). **C**, Top view of the cytokine-cytokine interface between IL3 molecules in two adjacent hexamers, as well as the interaction between the 30-PPLPLL-35 motif (shades of green) from IL3 in hexamer 1 and the β c' D2 domain from hexamer 2. The complete interface is defined as Site 5. **D**, Detailed view of the cytokine-cytokine interaction site between the IL3 molecules from adjacent hexamers (part of Site 5). **E**, Overlay of the hexameric cytokine receptor ternary complexes for IL3 (blue) and GM-CSF (yellow) reveals a marked difference in the curvature of the β c homodimer between the two complexes. Unlike the IL3R assembly interface (red box, left lower panel), the equivalent Site 4 interface of the GM-CSF receptor dodecamer complex is composed primarily of β c- β c' interactions (red box, right lower panel). Structures are shown in cartoon format, with key interacting residues displayed as sticks. IL3R Sites 1-3, assembly interface and cytokine-cytokine interaction site are summarized in Supplementary Table S2. Polar bonds are depicted as black dashed lines.