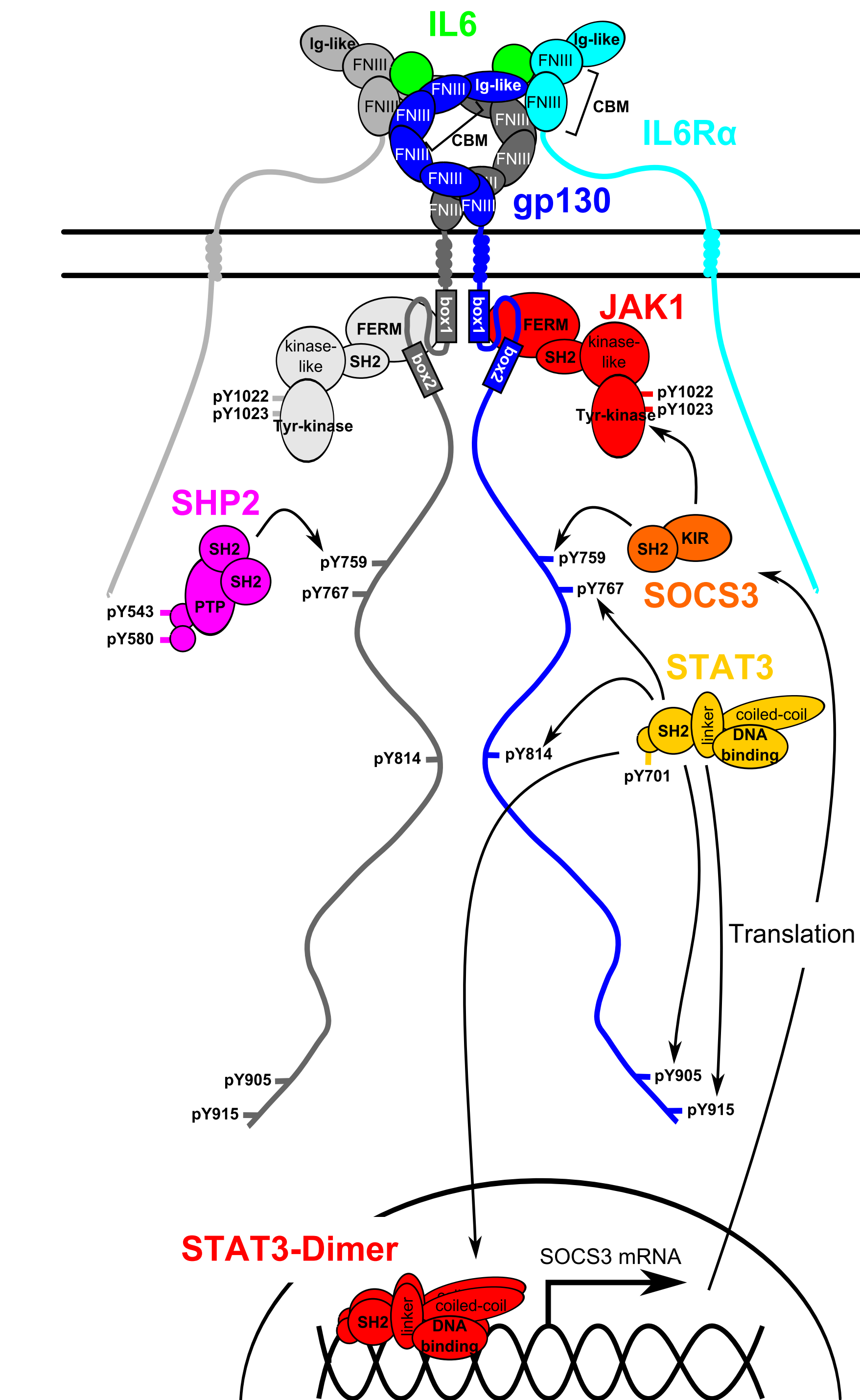
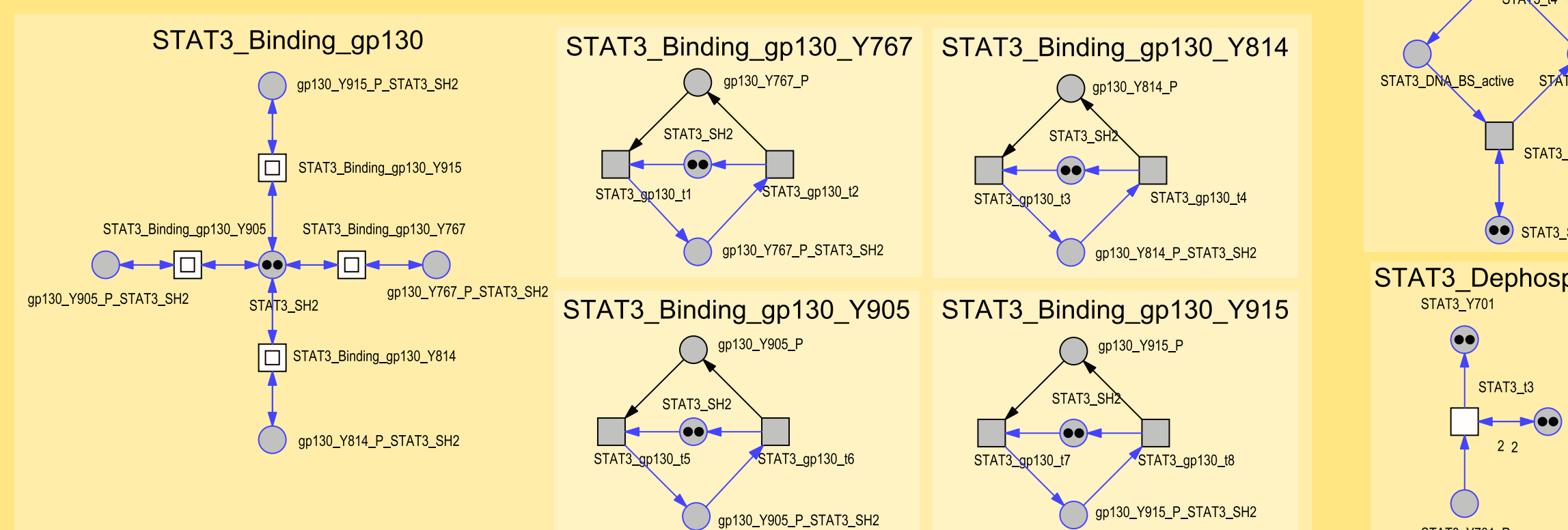
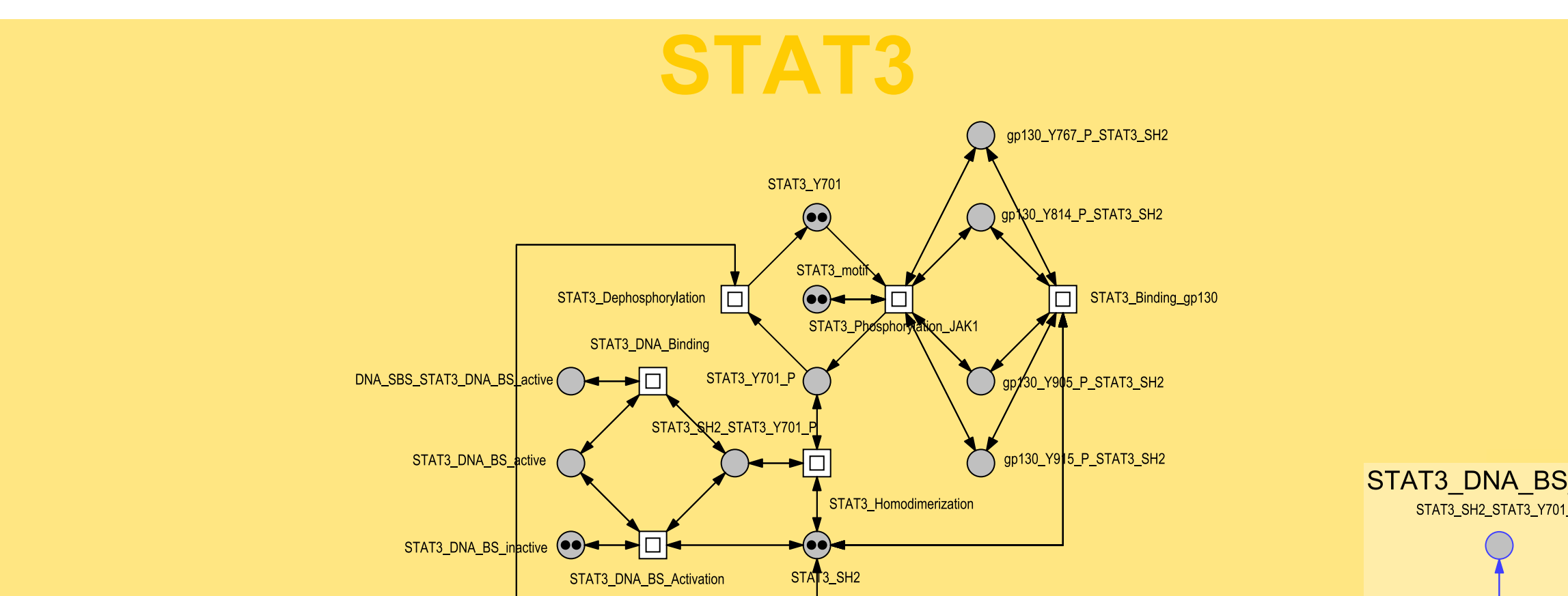
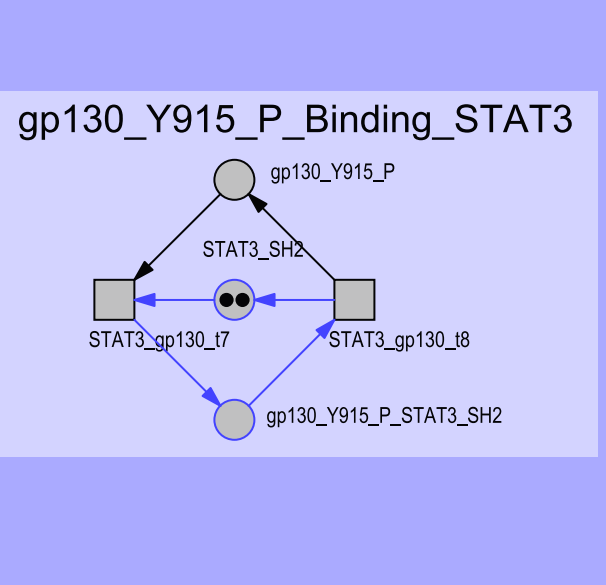
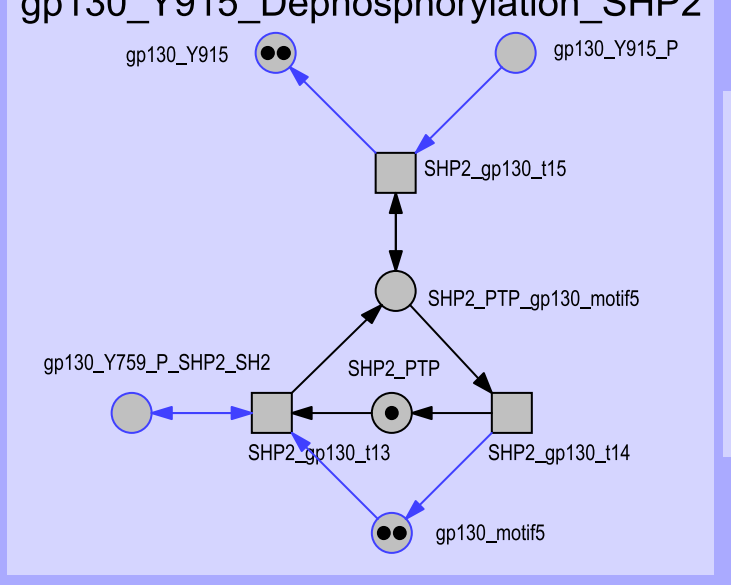
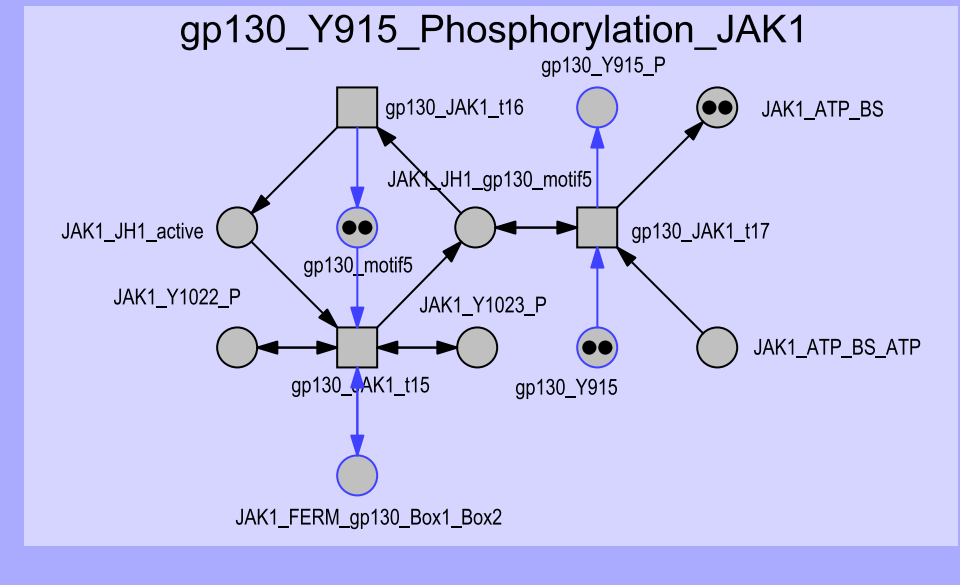
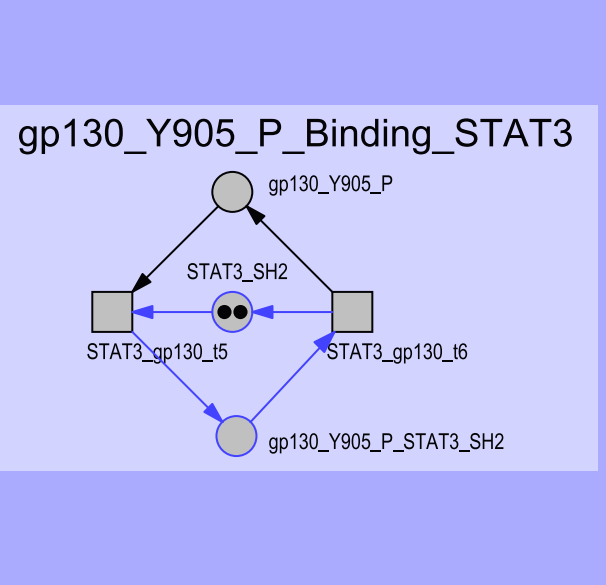
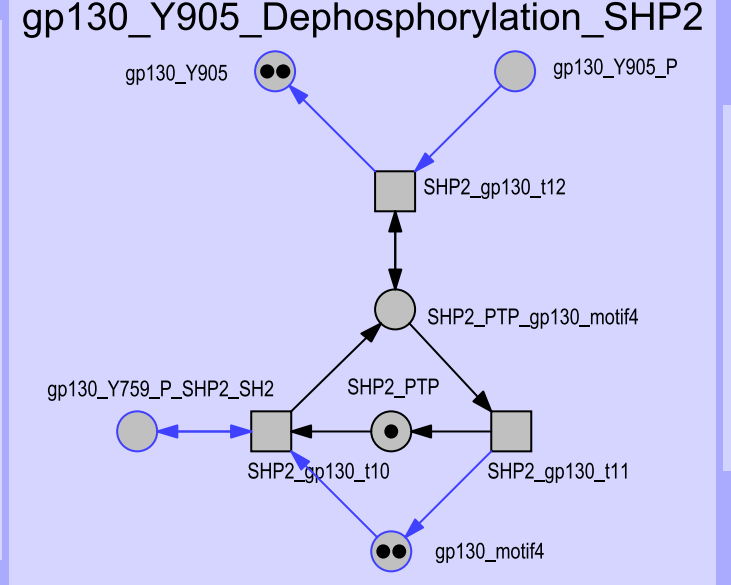
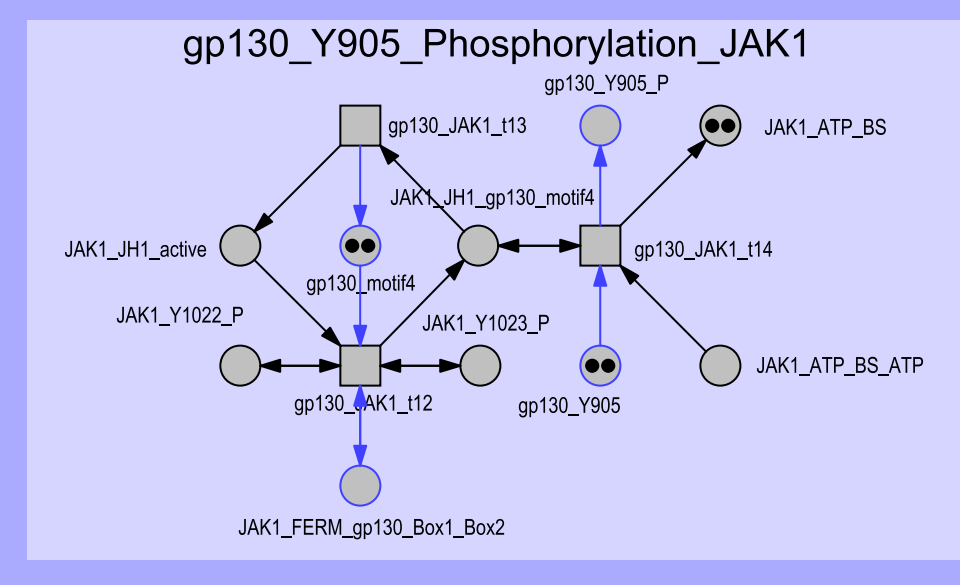
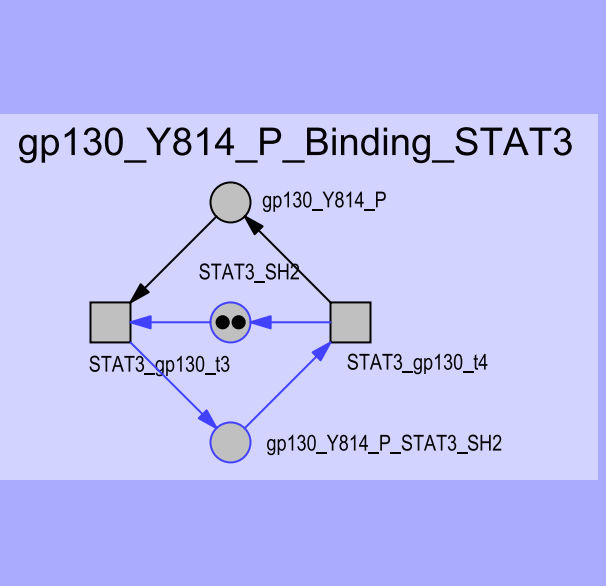
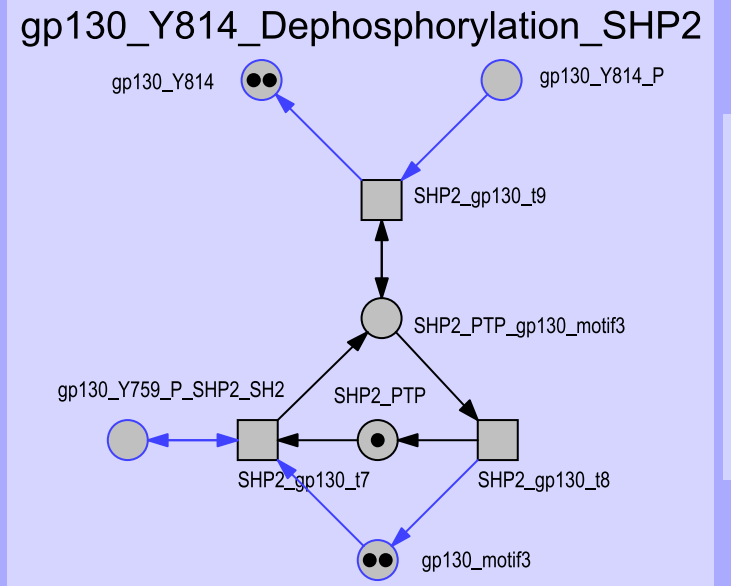
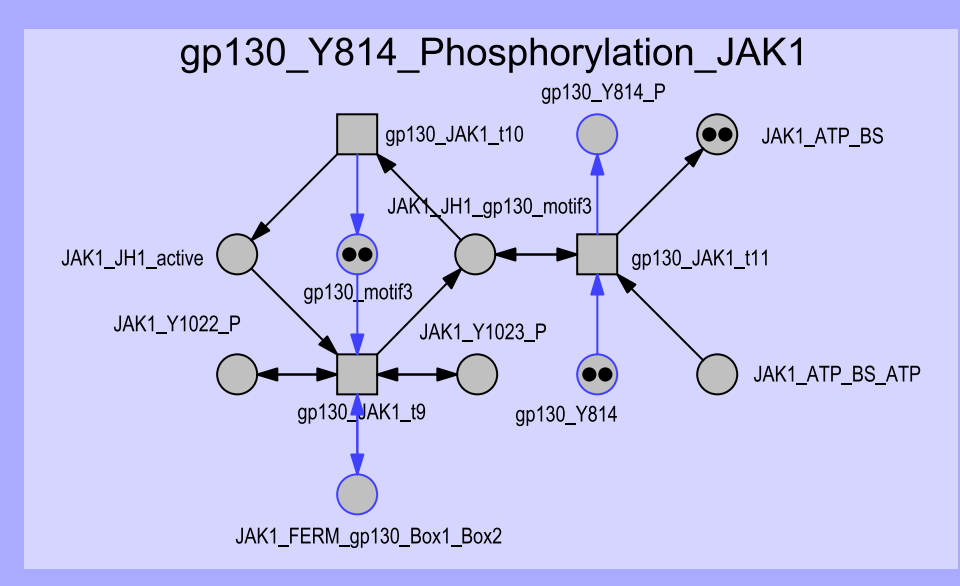
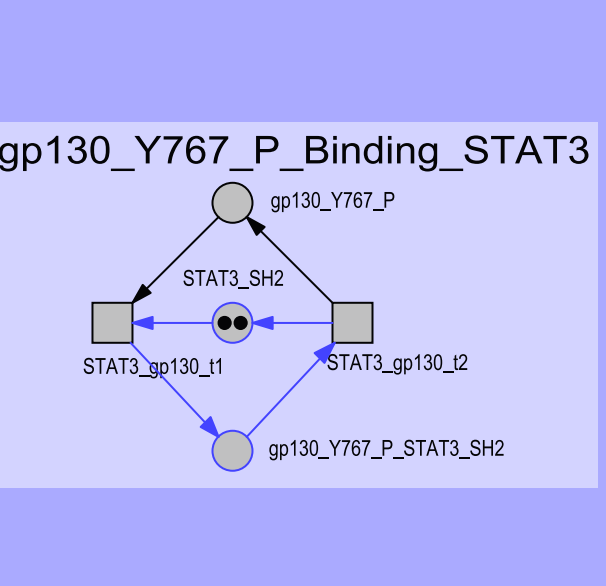
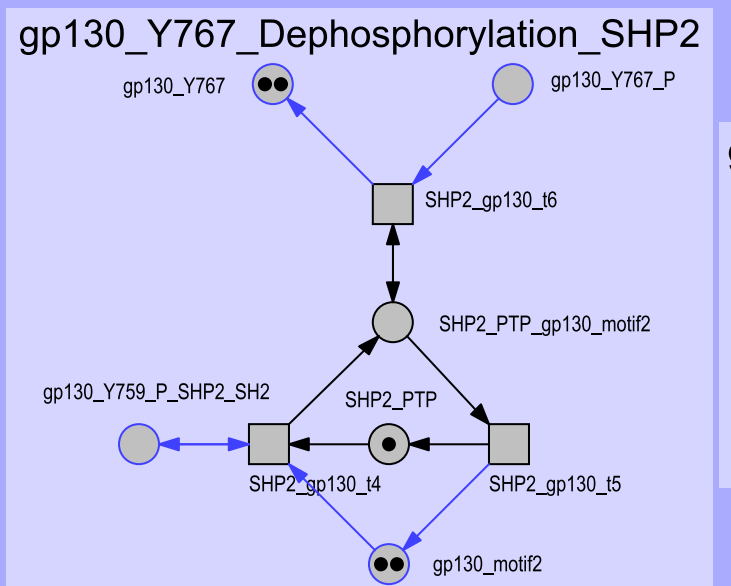
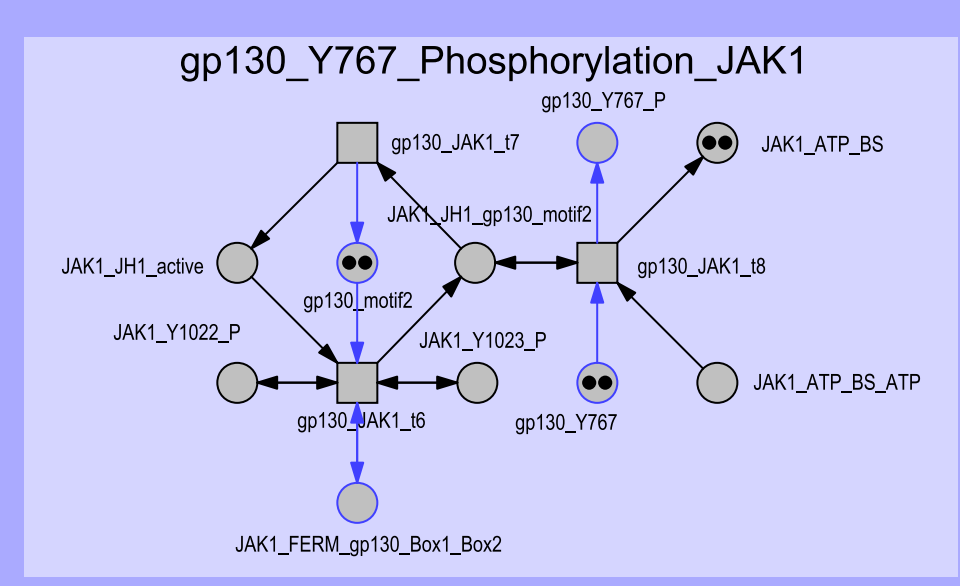
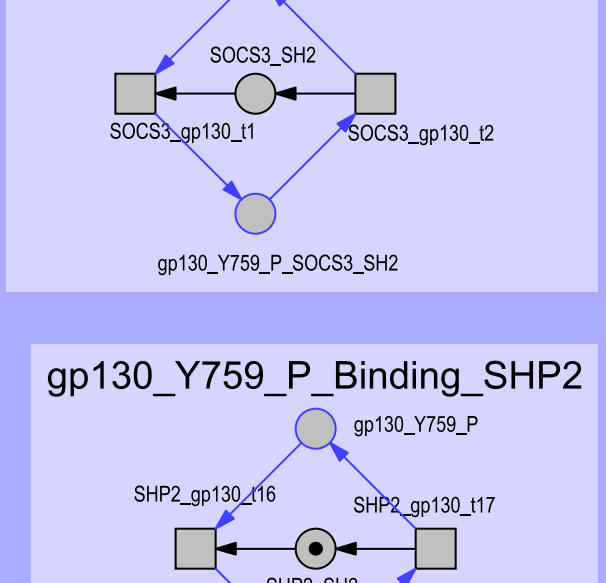
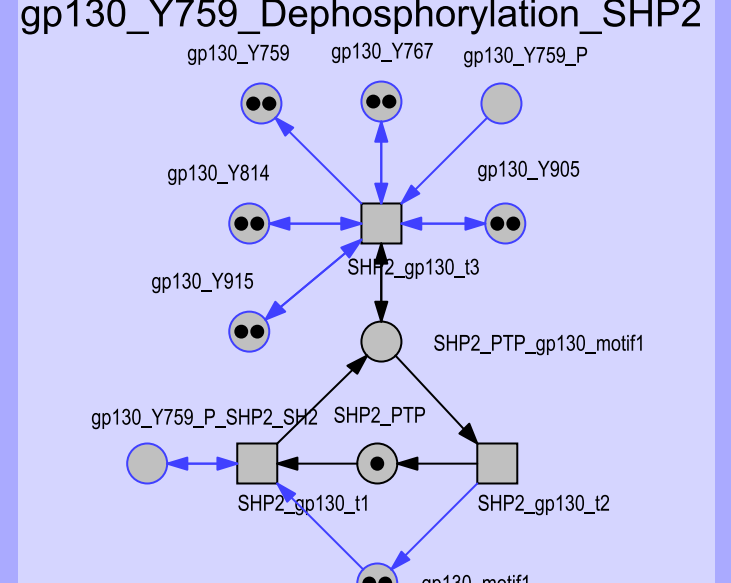
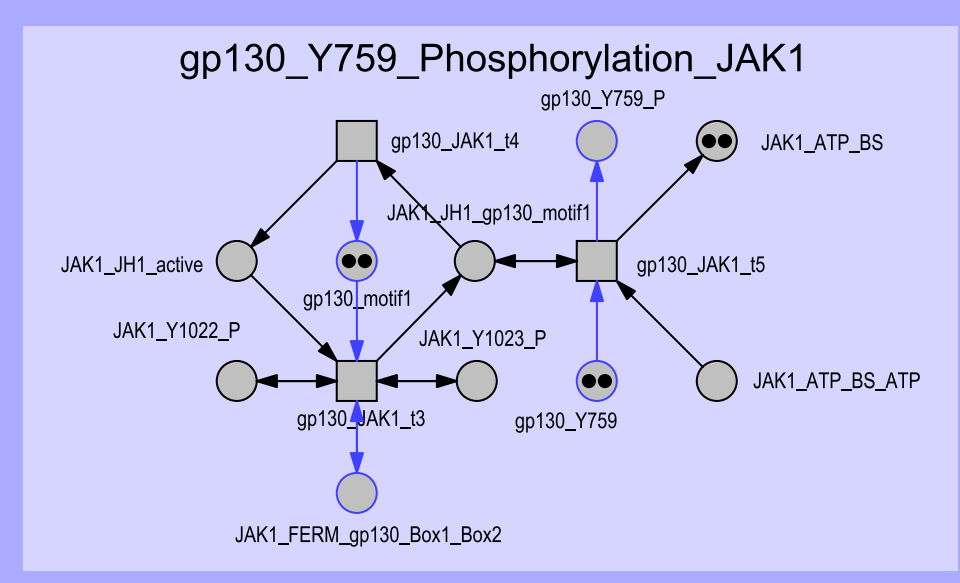
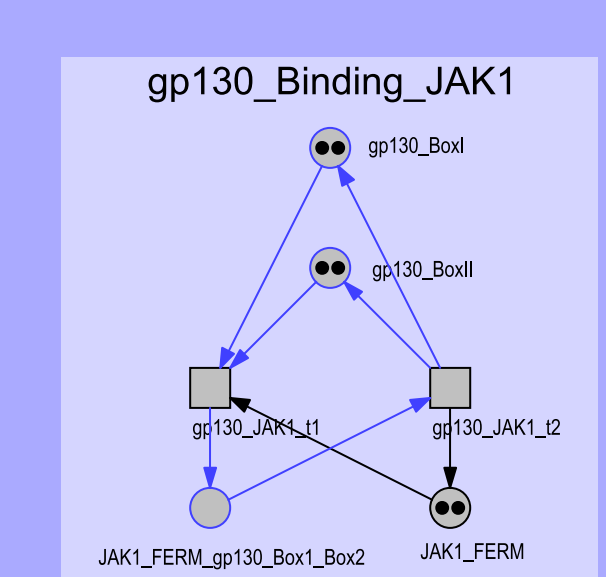
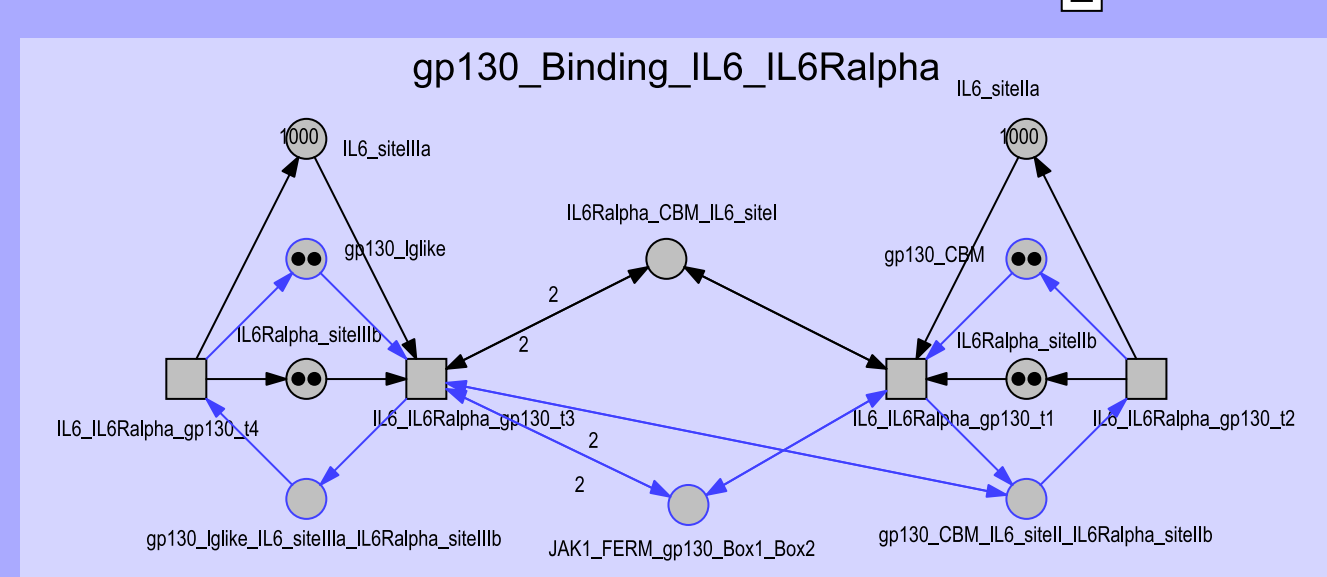
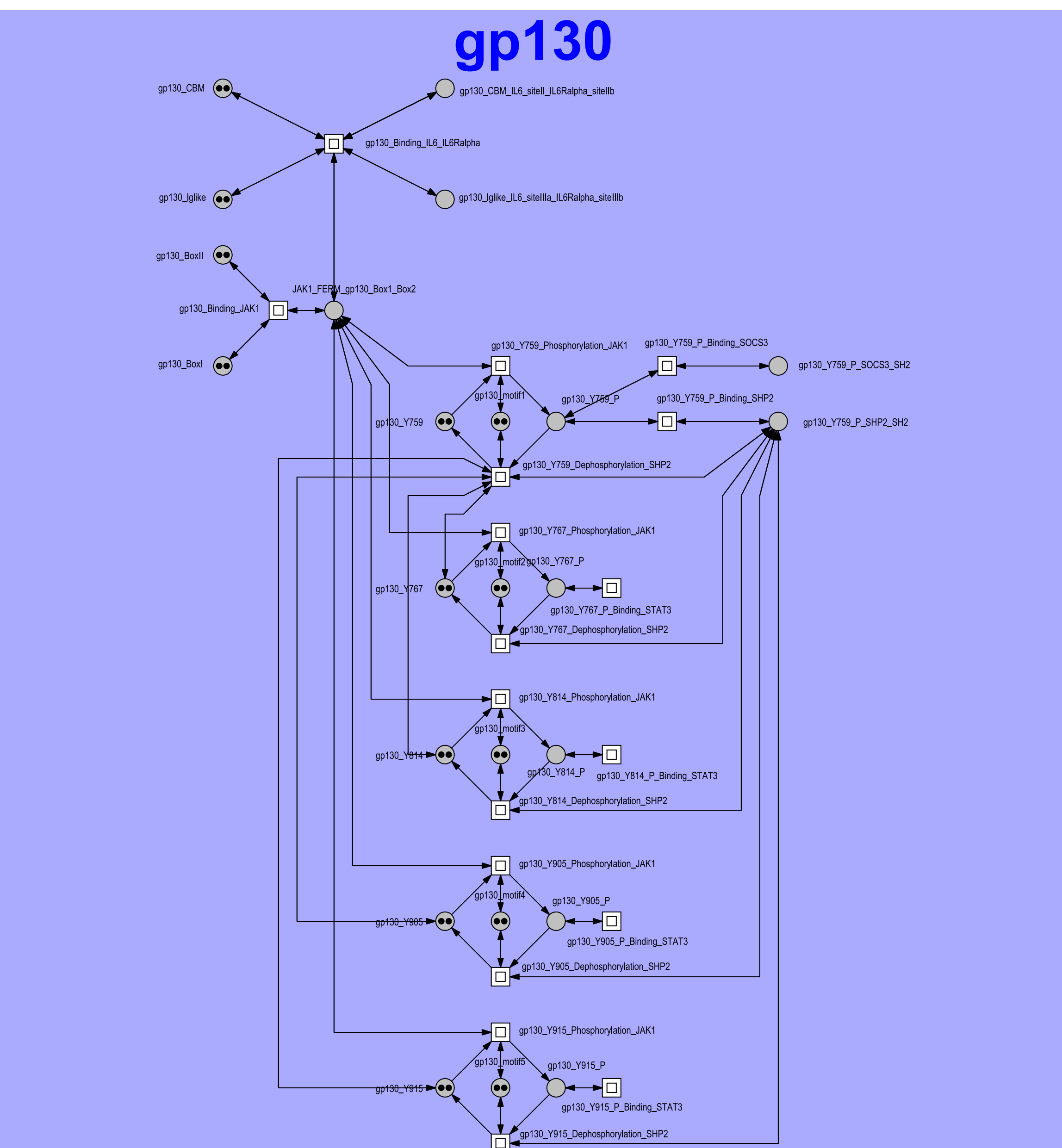




Structural model of the signalling IL-6 and translation into a modular network

The JAK/STAT pathway is activated by IL-6 (green) binding to IL6R- α (cyan) and gp130 (blue). After receptor complex activation JAK1 (red) constitutively bound to the gp130 is activated by transphosphorylation. Desphosphorylation depends on the activity of SHP2 (magenta) bound to gp130. The activated JAK1 can now phosphorylate tyrosine residue of gp130. STAT3 (yellow) binds to the phosphate tyrosines of gp130 and is also phosphorylated by JAK1. The phosphorylated STAT3 homodimer dissociates into the nucleus and binds the DNA to initiate transcription. The JAK/STAT pathway is a self-contained module, a self-contained autonomous and self-contained module (corresponding to the color code) around the cartoon. The Petri net in the black box illustrates the top-level of the modular network of the IL-6 signalling via the JAK/STAT pathway.

