Tyrosine phosphorylated IL6ST binds STAT1,STAT3

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

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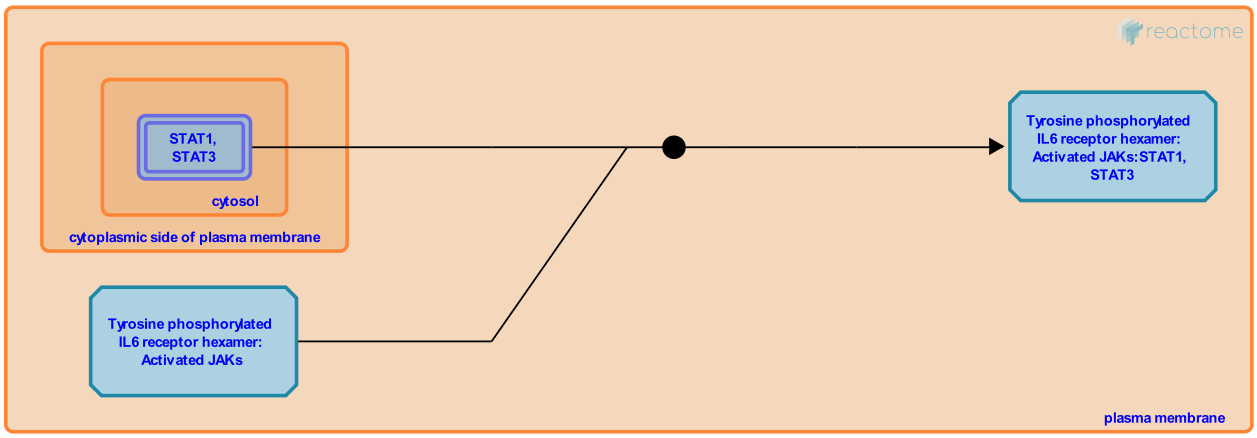
Stable identifier: R-HSA-1112565

Type: binding

Compartments: plasma membrane, cytosol



STAT1 binds to IL6ST (gp130) via phosphotyrosine residues 905 and 915 within two YXPD recognition motifs. STAT3 can be recruited to these sites and to two additional sites around Y767 and Y814 that have less restricted sequence recognition requirements (YXXQ) (Gerhartz et al. 1996). After receptor binding, STATs are phosphorylated on a single tyrosine residue by JAKs (Hemmann et al. 1996).

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Editions

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