IL6ST is tyrosine phosphorylated

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29/04/2024

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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

Literature references

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Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res, 46*, D649-D655. ↗

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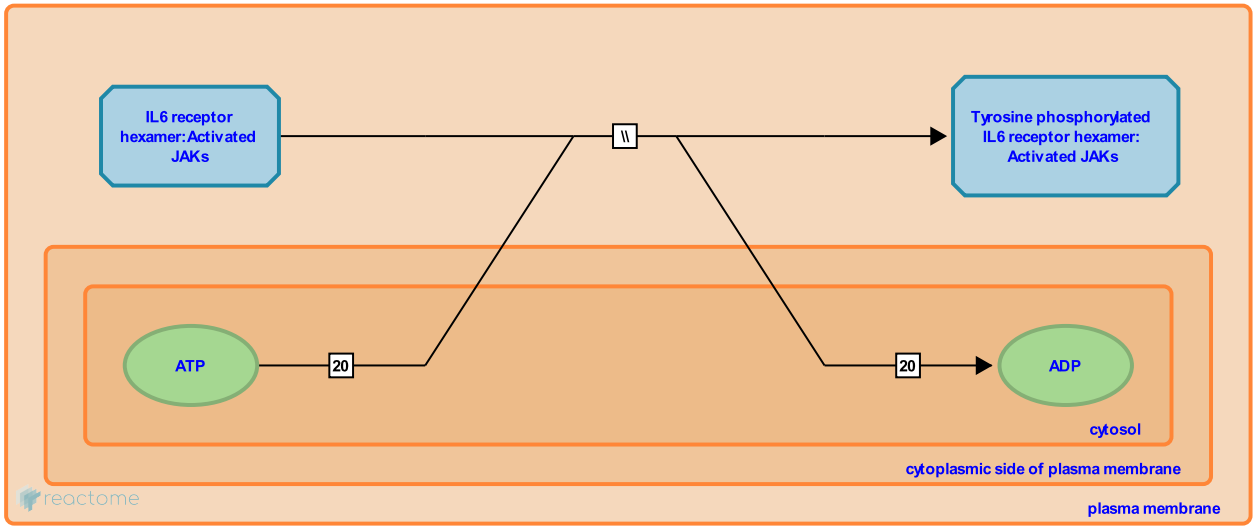
IL6ST is tyrosine phosphorylated ↗

Stable identifier: R-HSA-1112510

Type: omitted

Compartments: plasma membrane, cytosol



Activated JAKs are believed to be responsible for phosphorylating the cytoplasmic region of IL6ST (gp130) (Wang & Fuller 1994, Reich & Liu 2006) creating docking sites for adaptor and downstream signaling molecules, in particular the factors STAT1 and STAT3. Several phosphotyrosine residues of IL6ST are docking sites for STATs (Stahl et al. 1995, Gerhartz et al. 1996), Tyr-759 phosphorylation allows recruitment of the phosphatase SHP2.

Literature references

Fuller, GM., Wang, Y. (1994). Phosphorylation and internalization of gp130 occur after IL-6 activation of Jak2 kinase in hepatocytes. *Mol Biol Cell, 5*, 819-28. ↗

Reich, NC., Liu, L. (2006). Tracking STAT nuclear traffic. *Nat Rev Immunol, 6*, 602-12. ↗

Editions

2010-12-10	Edited	Jupe, S.
2010-12-13	Authored	Ray, KP.
2011-02-11	Reviewed	Rose-John, S.