IL35 binds IL6ST:IL6ST receptor

Pylayeva-Gupta, Y., Singh, K., Varusai, TM.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

06/05/2024

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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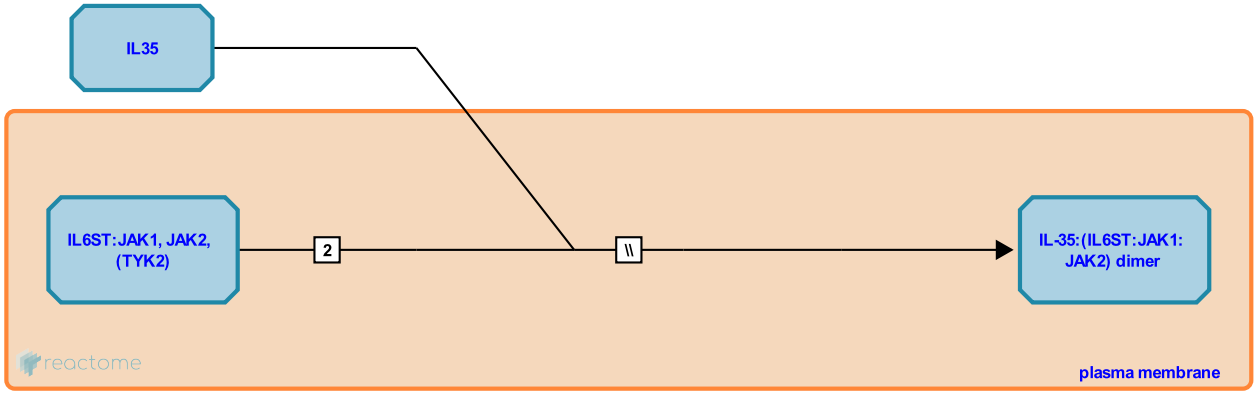
Stable identifier: R-HSA-8983518

Type: omitted

Compartments: plasma membrane, extracellular region, cytosol



Interleukin-35 (IL35) is a heteromeric complex conformed by Interleukin-12 subunit alpha (IL12A) and Interleukin-27 subunit alpha (IL27). IL35 can stimulate Janus Kinase (JAK)-bound homodimers of Interleukin-6 receptor beta precursor (IL6ST or gp130). JAKs are believed to be associated with the receptor before receptor activation (Behrmann et al., 2004). Subsequently, this triggers the phosphorylation of STAT1 downstream. The physiological consequence of this signalling is the suppression of T-cell response. The event is represented as a black box due to the incomplete knowledge about the ligand binding to monomers followed by dimerization or binding directly to the dimers.

Literature references

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Editions

2016-12-15	Authored, Edited	Varusai, TM.
2017-07-05	Reviewed	Singh, K.
2017-08-09	Reviewed	Pylayeva-Gupta, Y.