

STAT4 binds IL12RB2:IL12RB2

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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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- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)
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Reactome database release: 88

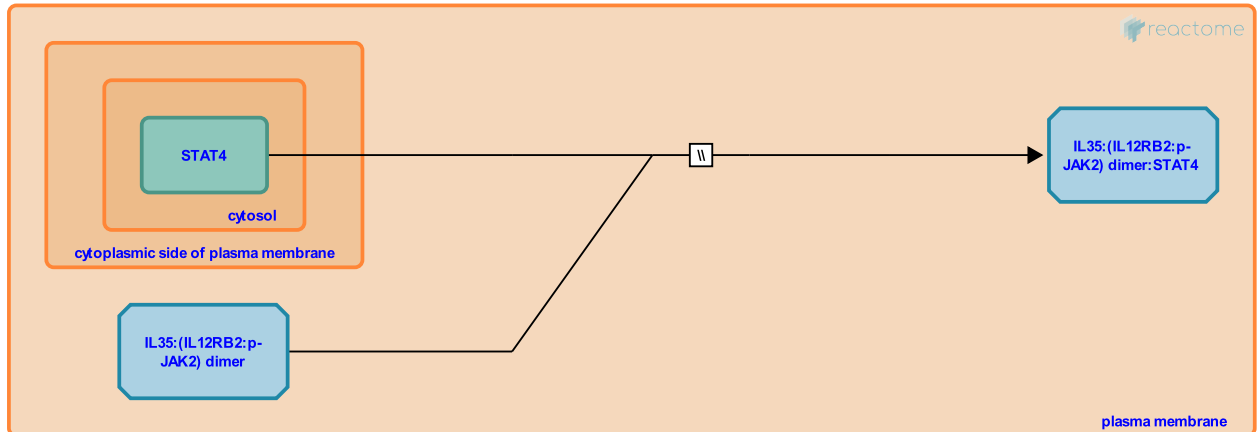
This document contains 1 reaction ([see Table of Contents](#))

STAT4 binds IL12RB2:IL12RB2 [↗](#)

Stable identifier: R-HSA-8983876

Type: omitted

Compartments: plasma membrane, cytosol, extracellular region



Interleukin-35 (IL35) binding activates the IL35 receptor complex and facilitates JAKs phosphorylation. Subsequently, Signal transducer and activator of transcription 4-alpha/beta (STAT4) binds to the receptor complex and is activated by tyrosine phosphorylation (Collison et al. 2012). This is a black box event because the receptor subunit responsible for STAT4 binding to the receptor is unclear.

Literature references

Delgoffe, GM., Murray, PJ., Drake, CG., Satoskar, AR., Fairweather, D., Guy, CS. et al. (2012). The composition and signaling of the IL-35 receptor are unconventional. *Nat. Immunol.*, 13, 290-9. [↗](#)

Editions

2016-12-15	Authored, Edited	Varusai, TM.
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