

p-Y705-STAT3 dissociates from IL10 di- mer:2xp-Y-IL10RA:p-Y-JAK1:2xIL10RB:p- Y-TYK2:p-Y705-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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- 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: 70

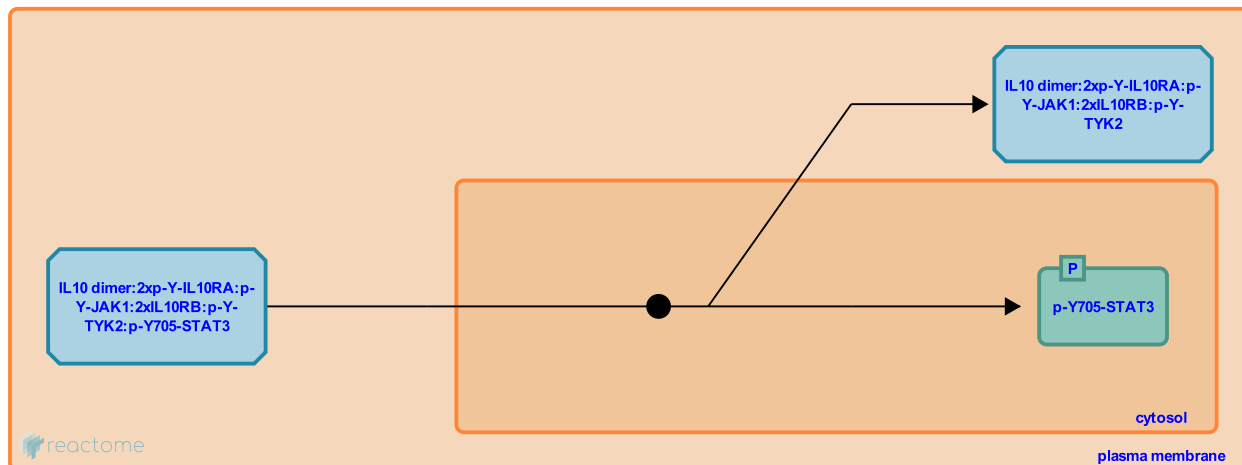
This document contains 1 reaction ([see Table of Contents](#))

p-Y705-STAT3 dissociates from IL10 dimer:2xp-Y-IL10RA:p-Y-JAK1:2xIL10RB:p-Y-TYK2:p-Y705-STAT3 ↗

Stable identifier: R-HSA-6784791

Type: dissociation

Compartments: cytosol, extracellular region, plasma membrane



Once phosphorylated, STAT3 dissociates from the receptor, dimerizes with other STAT3 molecules, and translocates to the nucleus where it binds with high affinity to STAT-binding elements (SBEs) in the promoters of IL-10-inducible genes (Donnelly et al. 1999).

Literature references

Donnelly, RP., Dickensheets, H., Finbloom, DS. (1999). The interleukin-10 signal transduction pathway and regulation of gene expression in mononuclear phagocytes. *J. Interferon Cytokine Res.*, 19, 563-73. ↗

Editions

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