

# Phosphorylated STAT5 is released

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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. [↗](#)
- 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. [↗](#)
- Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, 14, e1005968. [↗](#)

Reactome database release: 75

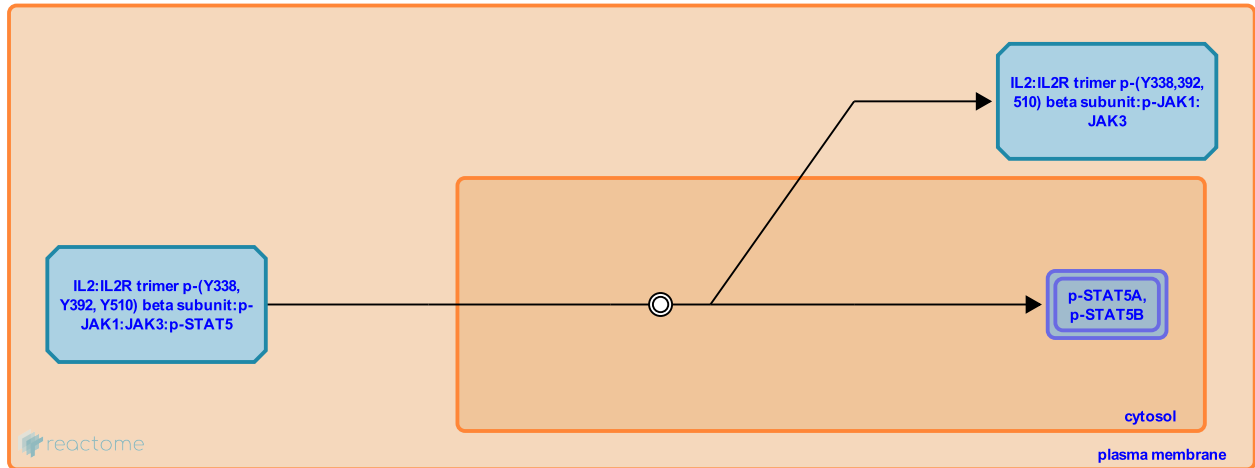
This document contains 1 reaction ([see Table of Contents](#))

## Phosphorylated STAT5 is released ↗

**Stable identifier:** R-HSA-919404

**Type:** dissociation

**Compartments:** cytosol, plasma membrane



Deletion mutants have demonstrated that STAT dimerization can occur independently of the binding of 2 STAT molecules by a dimeric receptor. Although this does not exclude the possibility that STATs may dimerize while still associated with the receptor complex, dimerization is believed to occur following the release of phosphorylated monomers (e.g. Turkson & Jove 2000).

### Literature references

Behrmann, I., Janzen, C., Gerhartz, C., Schmitz-Van de Leur, H., Hermanns, H., Heesel, B. et al. (1997). A single STAT recruitment module in a chimeric cytokine receptor complex is sufficient for STAT activation. *J Biol Chem*, 272, 5269-74. ↗

### Editions

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