# p-Y701-STAT1, p-Y705-STAT3, p-Y649-STAT5 dissociates from IL9:p-Y407-IL9R:JAK1:IL2RG:p-904,939-JAK3: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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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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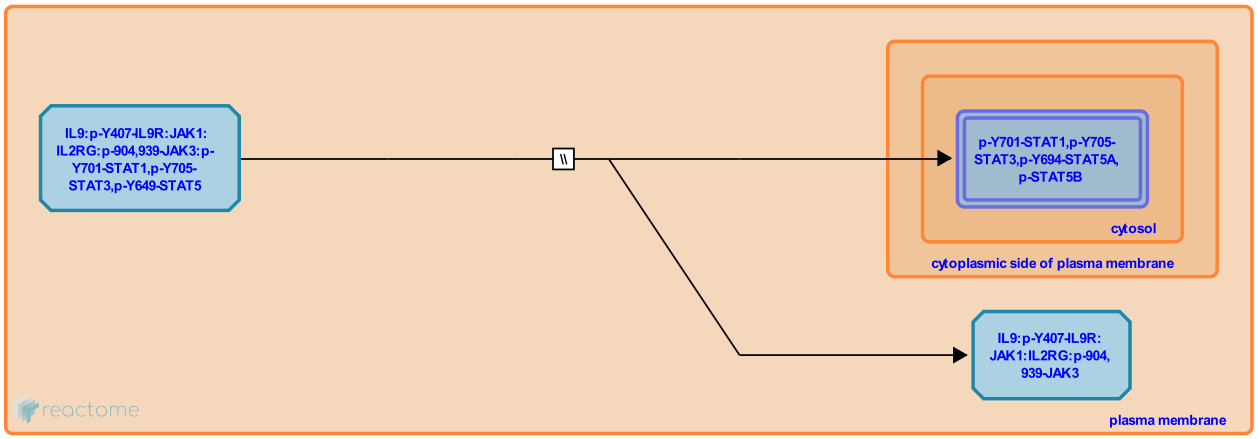
## p-Y701-STAT1, p-Y705-STAT3, p-Y649-STAT5 dissociates from IL9:p-Y407-IL9R:JAK1:IL2RG:p-904,939-JAK3:p-Y705-STAT3

**Stable identifier:** R-HSA-8985900

**Type:** omitted

**Compartments:** cytosol, extracellular region, plasma membrane




Signal transducer and activator of transcription 1-alpha/beta (STAT1), STAT3 and STAT5A/STAT5B (collectively termed STAT5) are believed to dissociate from the Interleukin 9:Interleukin 9 receptor complex.

STAT1 (Demoulin et al, 1996), STAT3 (Yamasaki et al. 2010) and STAT5 (Demoulin et al. 2000) have been identified as parts of complexes associated with DNA in the nucleus following IL9 stimulation. All 3 STATs are believed to follow the standard model for STAT signaling, namely dissociation from the receptor complex, dimerization and translocation to the nucleus (Demoulin et al. 2000, Demoulin et al. 2000, Levy & Darnell 2002).

## Literature references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## Editions

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