

p-Y-STAT1,3,5 dimer translocates from the cytosol to the nucleoplasm

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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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Reactome database release: 88

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

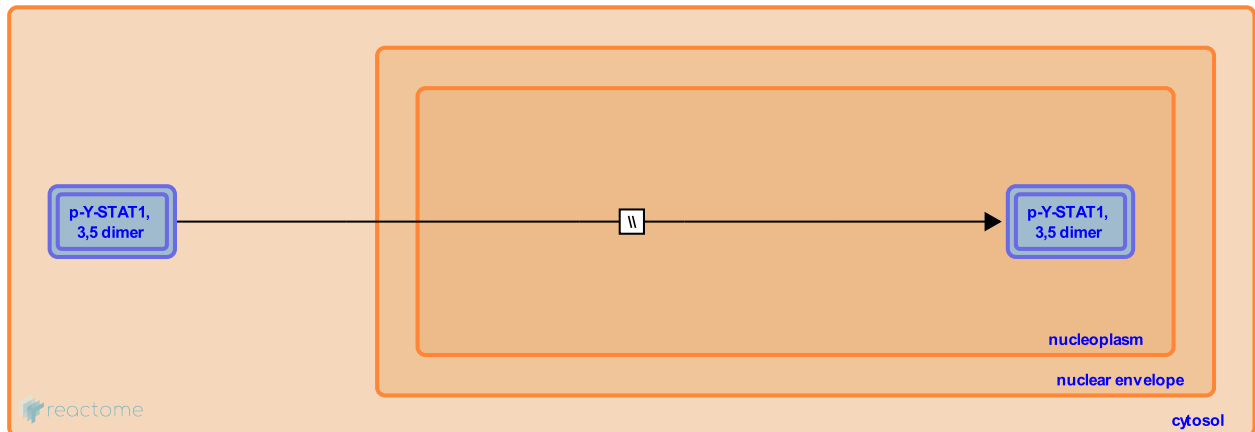
p-Y-STAT1,3,5 dimer translocates from the cytosol to the nucleoplasm [↗](#)

Stable identifier: R-HSA-9674550

Type: omitted

Compartments: cytosol, nucleoplasm

Inferred from: p-Y-Stat1,3,5 dimer translocates from the cytosol to the nucleus (Mus musculus)



Homodimers of phosphorylated STAT1, STAT3, and STAT5 and heterodimers of phosphorylated STAT1 and STAT3 translocate from the cytosol to the nucleus (Tian et al. 1994, Tian et al. 1996, Ward et al. 1999, also inferred from mouse homologs).

Literature references

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Schelen, AM., Smith, L., Ward, AC., Touw, IP., Hermans, MH., Antonissen, C. et al. (1999). Tyrosine-dependent and -independent mechanisms of STAT3 activation by the human granulocyte colony-stimulating factor (G-CSF) receptor are differentially utilized depending on G-CSF concentration. *Blood*, 93, 113-24. [↗](#)

Tian, SS., Rosen, J., Tapley, P., Stein, RB., Sincich, C., Lamb, P. (1996). Multiple signaling pathways induced by granulocyte colony-stimulating factor involving activation of JAKs, STAT5, and/or STAT3 are required for regulation of three distinct classes of immediate early genes. *Blood*, 88, 4435-44. [↗](#)

Editions

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| 2020-01-13 | Authored, Edited | May, B. |
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