

STAT5 dimers translocate to the nucleus

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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: 77

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

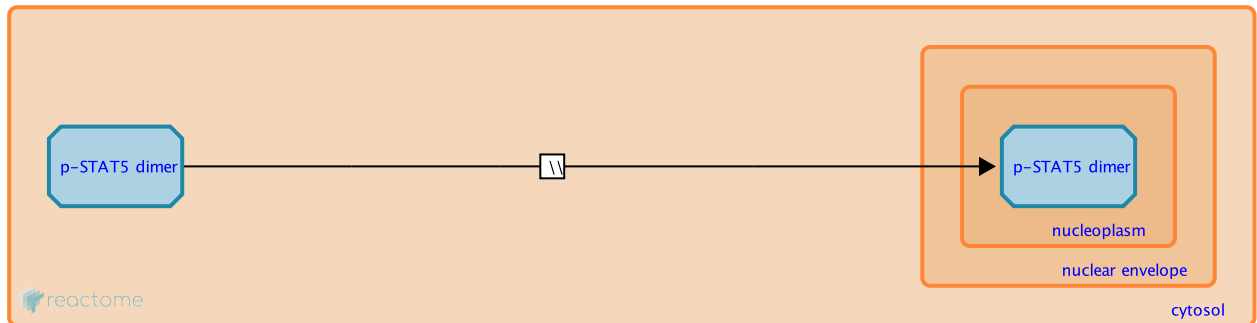
STAT5 dimers translocate to the nucleus [↗](#)

Stable identifier: R-HSA-507937

Type: omitted

Compartments: cytosol, nucleoplasm

Inferred from: [Phosphorylated Stat5 Dimer Translocates to the Nucleus \(Mus musculus\)](#)



Interleukin-7 (IL7)-activated Signal transducer and activator of transcription 5A or 5B (typically referred to as STAT5) is recruited rapidly to the promoters of IL7-regulated genes (Ye et al. 2001, Stanton & Brodeur 2005).

Literature references

Ye, SK., Agata, Y., Lee, HC., Kurooka, H., Kitamura, T., Shimizu, A. et al. (2001). The IL-7 receptor controls the accessibility of the TCRgamma locus by Stat5 and histone acetylation. *Immunity*, 15, 813-23. [↗](#)

Stanton, ML., Brodeur, PH. (2005). Stat5 mediates the IL-7-induced accessibility of a representative D-Distal VH gene. *J. Immunol.*, 174, 3164-8. [↗](#)

Editions

2010-05-17	Authored	Ray, KP.
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