

Expression of STAT5 upregulated genes

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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: 88

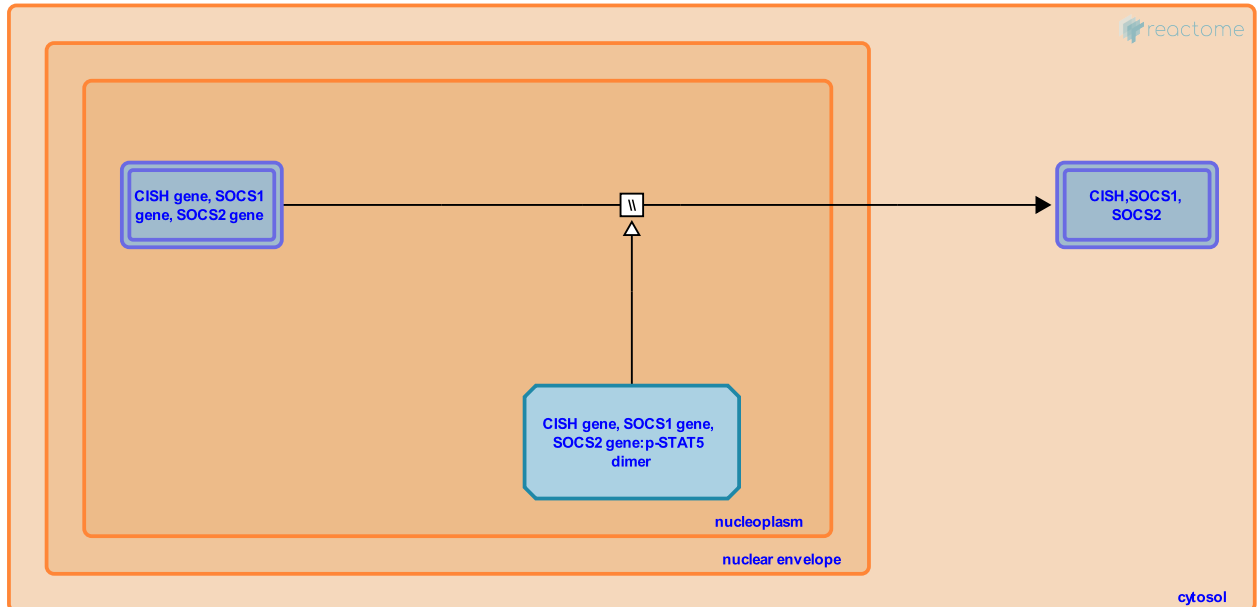
This document contains 1 reaction ([see Table of Contents](#))

Expression of STAT5 upregulated genes ↗

Stable identifier: R-HSA-8983011

Type: omitted

Compartments: cytosol, nucleoplasm



Interleukin-7 (IL7) stimulation upregulates expression of the transcripts and proteins encoding Cytokine-inducible SH2-containing protein (CISH), Suppressor of cytokine signaling 1 (SOCS1) and Suppressor of cytokine signaling 2 (SOCS2) in CD8⁺ T cells (Ghazawi et al. 2016).

This is a black-box event since details of the mechanism of transcription and translation are omitted.

Literature references

MacPherson, PA., Faller, EM., El-Salfiti, A., Ghazawi, FM., Parmar, P. (2016). Suppressor of cytokine signaling (SOCS) proteins are induced by IL-7 and target surface CD127 protein for degradation in human CD8 T cells. *Cell. Immunol.*, 306, 41-52. ↗

Editions

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