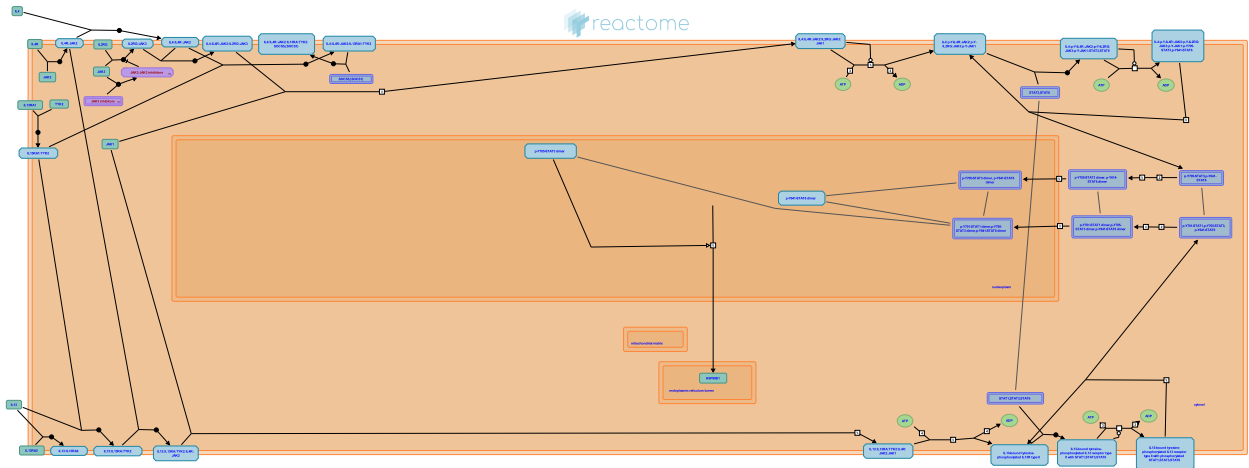


Interleukin-4 and Interleukin-13 signaling



European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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This is just an excerpt of a full-length report for this pathway. To access the complete report, please download it at the [Reactome Textbook](https://reactome.org/textbook/).

03/05/2024

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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

Literature references

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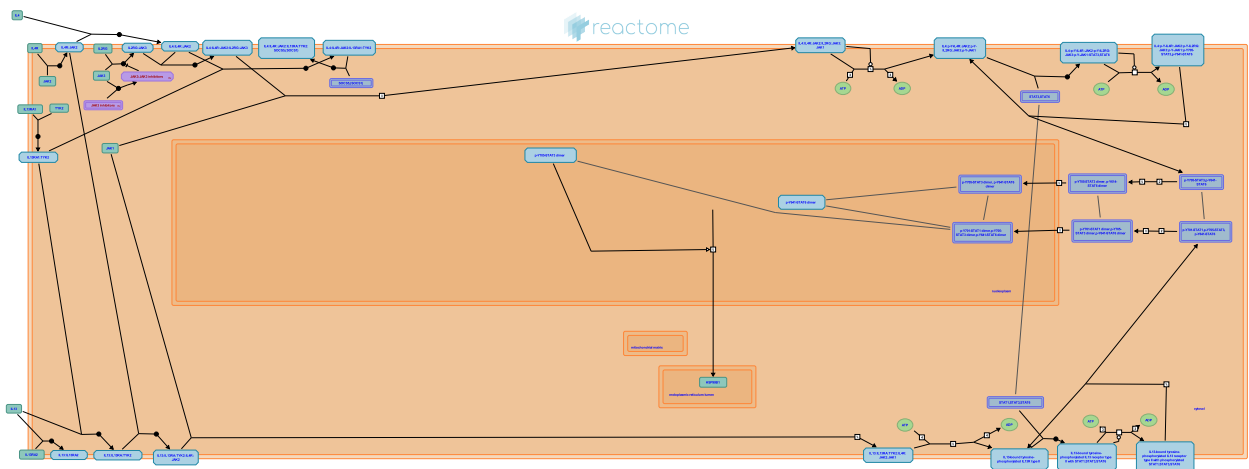
Reactome database release: 88

This document contains 1 pathway and 26 reactions ([see Table of Contents](#))

Interleukin-4 and Interleukin-13 signaling ↗

Stable identifier: R-BTA-6785807

Inferred from: [Interleukin-4 and Interleukin-13 signaling \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

IL4R binds JAK2 ↗

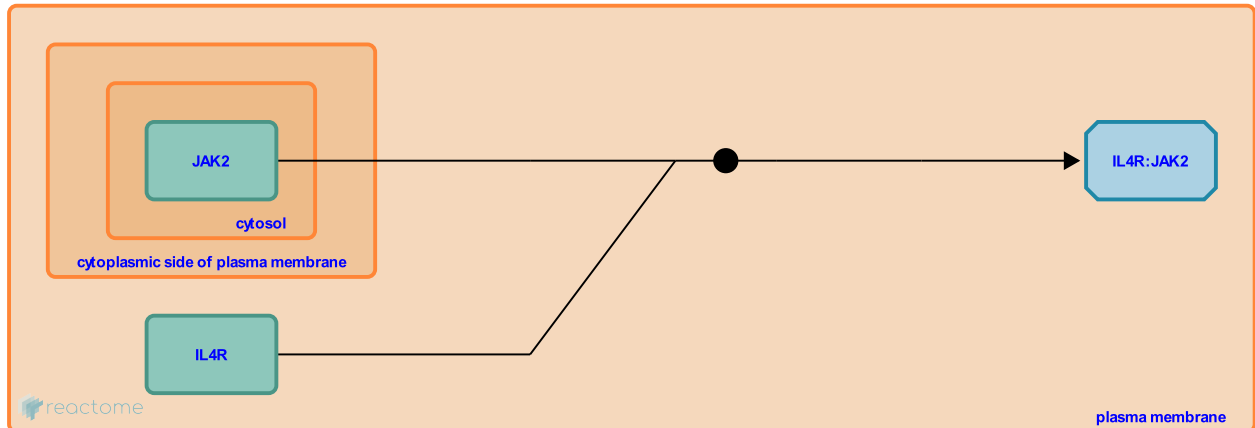
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6785898

Type: binding

Compartments: plasma membrane, cytosol

Inferred from: [IL4R binds JAK2 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Followed by: [IL13:IL13RA:TYK2 binds IL4R:JAK2](#), [IL4 binds IL4R:JAK2](#)

IL2RG binds JAK3 ↗

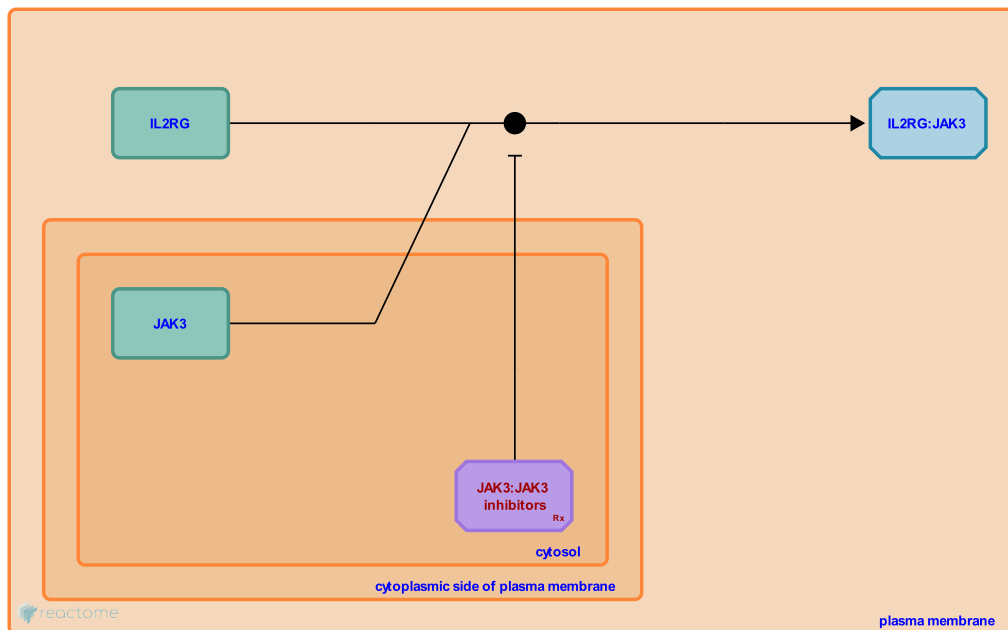
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-451895

Type: binding

Compartments: plasma membrane, cytosol

Inferred from: [IL2RG binds JAK3 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Followed by: [IL4:IL4R:JAK2 binds IL2RG:JAK3](#)

JAK3 binds JAK3 inhibitors ↗

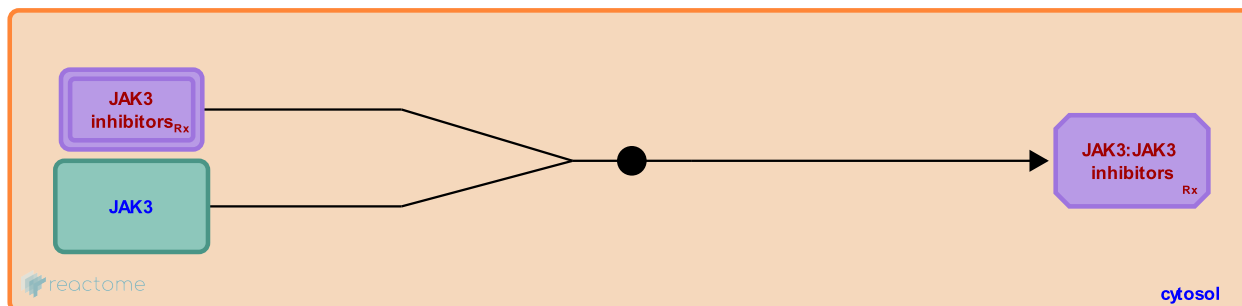
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-9679028

Type: binding

Compartments: cytosol

Inferred from: [JAK3 binds JAK3 inhibitors \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

IL13RA1 binds TYK2 ↗

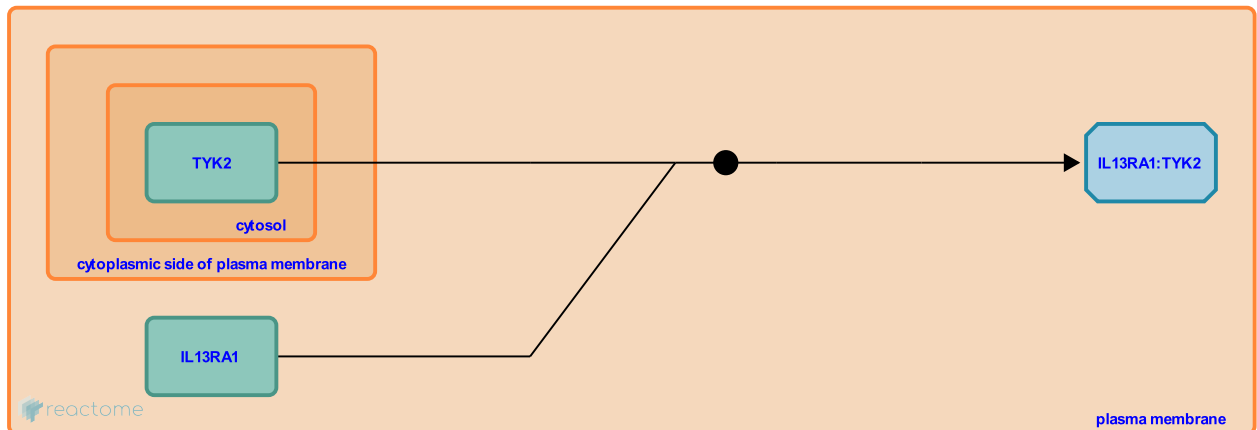
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6785762

Type: binding

Compartments: plasma membrane, cytosol

Inferred from: [IL13RA1 binds TYK2 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Followed by: [IL4:IL4R:JAK2 binds IL13RA1:TYK2](#), [IL13 binds IL13RA:TYK2](#)

IL4 binds IL4R:JAK2 ↗

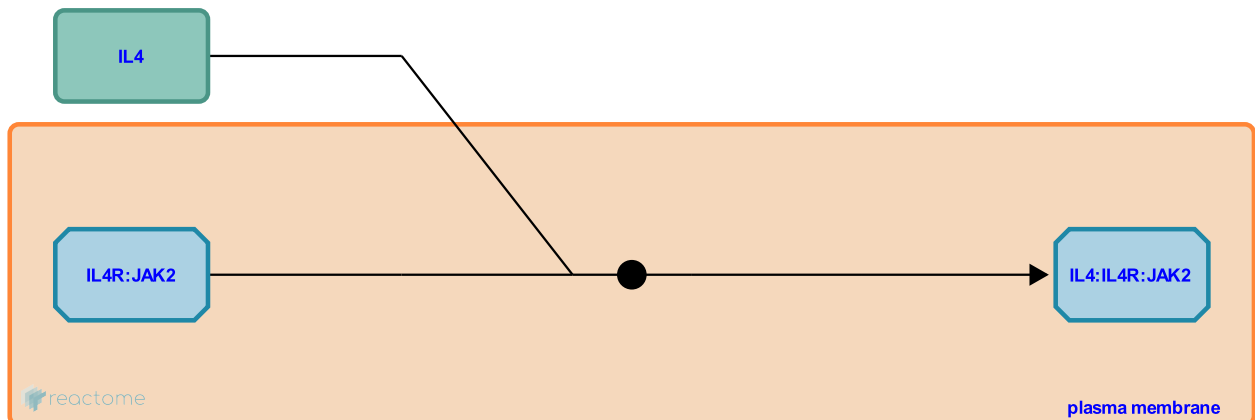
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786101

Type: binding

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [IL4 binds IL4R:JAK2 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL4R binds JAK2](#)

Followed by: [IL4:IL4R:JAK2 binds IL13RA1:TYK2](#), [IL4:IL4R:JAK2 binds IL2RG:JAK3](#)

IL4:IL4R:JAK2 binds IL2RG:JAK3 ↗

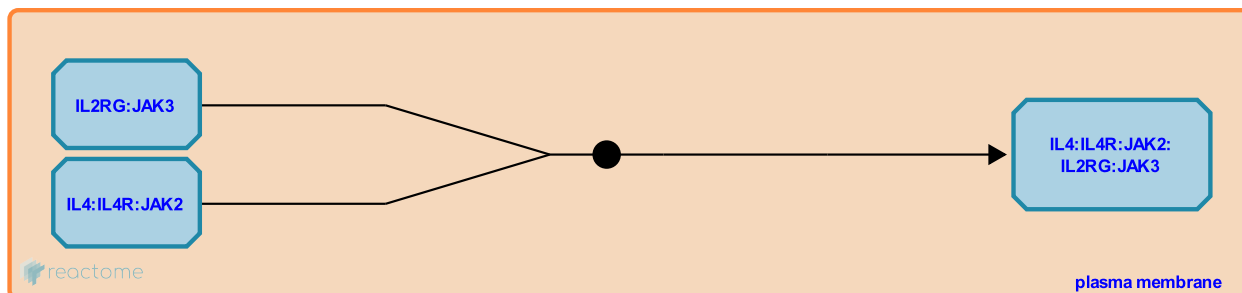
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786092

Type: binding

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [IL4:IL4R:JAK2 binds IL2RG:JAK3 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL2RG binds JAK3](#), [IL4 binds IL4R:JAK2](#)

Followed by: [JAK1 binds IL4R in IL4-bound IL4R1](#)

IL4:IL4R:JAK2 binds IL13RA1:TYK2 ↗

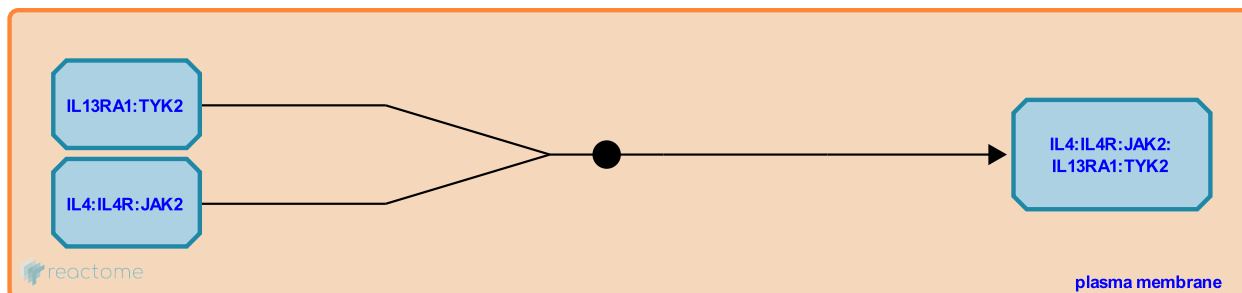
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786070

Type: binding

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [IL4:IL4R:JAK2 binds IL13RA1:TYK2 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL13RA1 binds TYK2](#), [IL4 binds IL4R:JAK2](#)

Followed by: [SOCS5,\(SOCS1\) bind IL4RA](#)

JAK1 binds IL4R in IL4-bound IL4R1 ↗

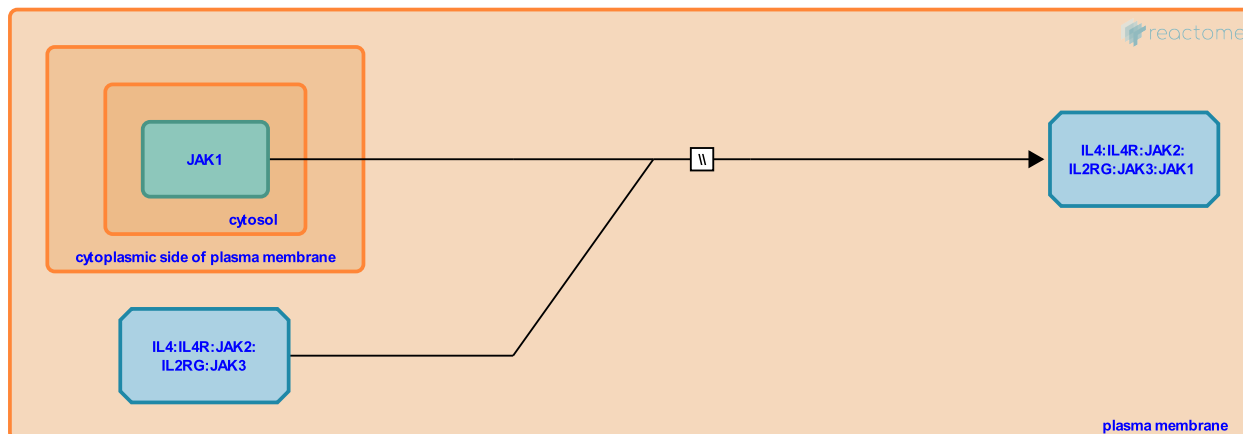
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786058

Type: omitted

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [JAK1 binds IL4R in IL4-bound IL4R1 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL4:IL4R:JAK2 binds IL2RG:JAK3](#)

Followed by: [IL4R, IL2RG, JAK1 in IL4-bound IL4R1:JAK1 are phosphorylated](#)

IL4R, IL2RG, JAK1 in IL4-bound IL4R1:JAK1 are phosphorylated ↗

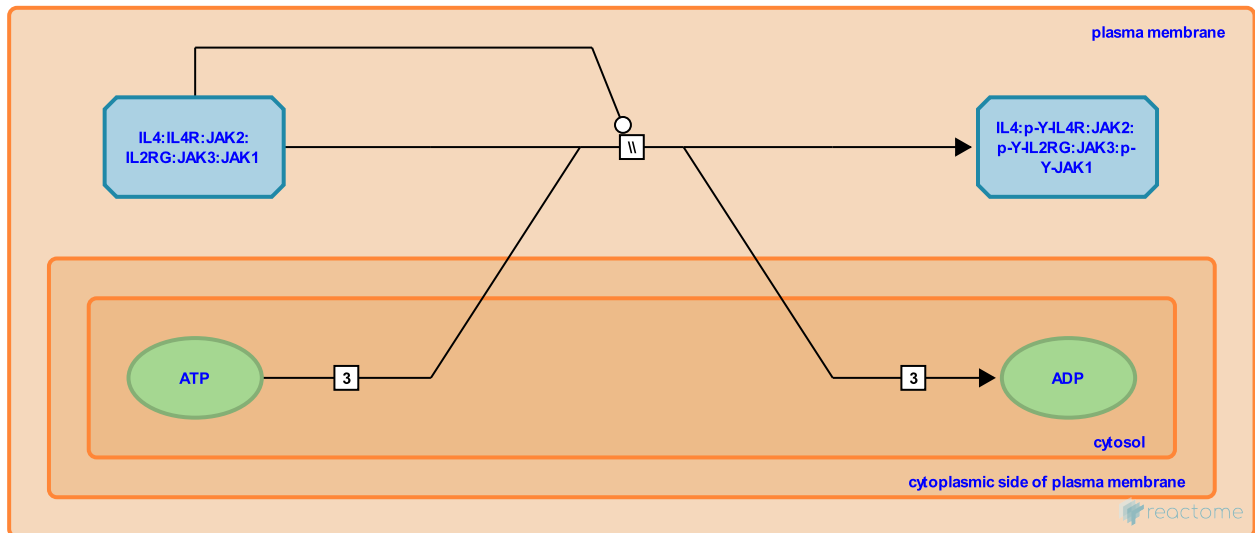
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786096

Type: omitted

Compartments: plasma membrane

Inferred from: [IL4R, IL2RG, JAK1 in IL4-bound IL4R1:JAK1 are phosphorylated \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [JAK1 binds IL4R in IL4-bound IL4R1](#)

Followed by: [STAT3,STAT6 bind p-Y-IL4R](#)

STAT3,STAT6 bind p-Y-IL4R ↗

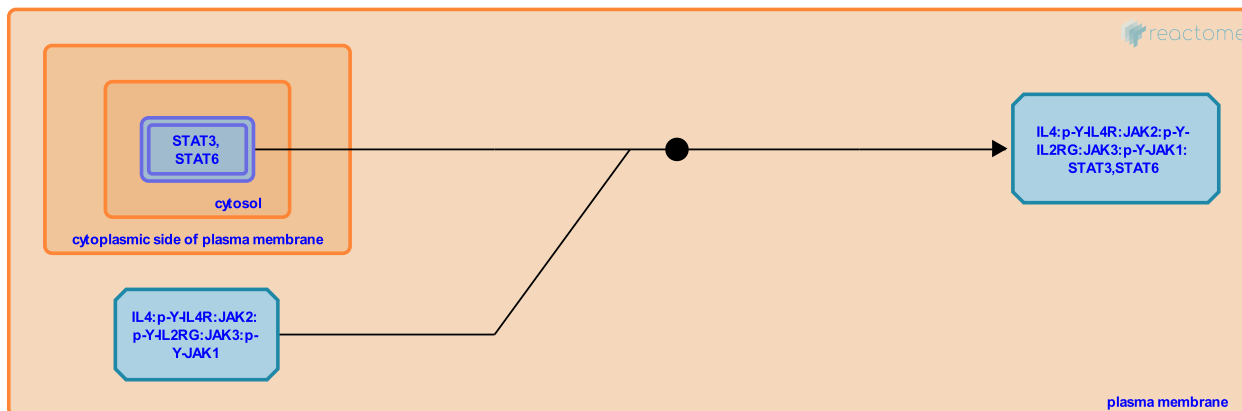
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786124

Type: binding

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [STAT3,STAT6 bind p-Y-IL4R \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL4R, IL2RG, JAK1 in IL4-bound IL4R1:JAK1 are phosphorylated](#)

Followed by: [JAK1 phosphorylates STAT3,STAT6](#)

JAK1 phosphorylates STAT3,STAT6 ↗

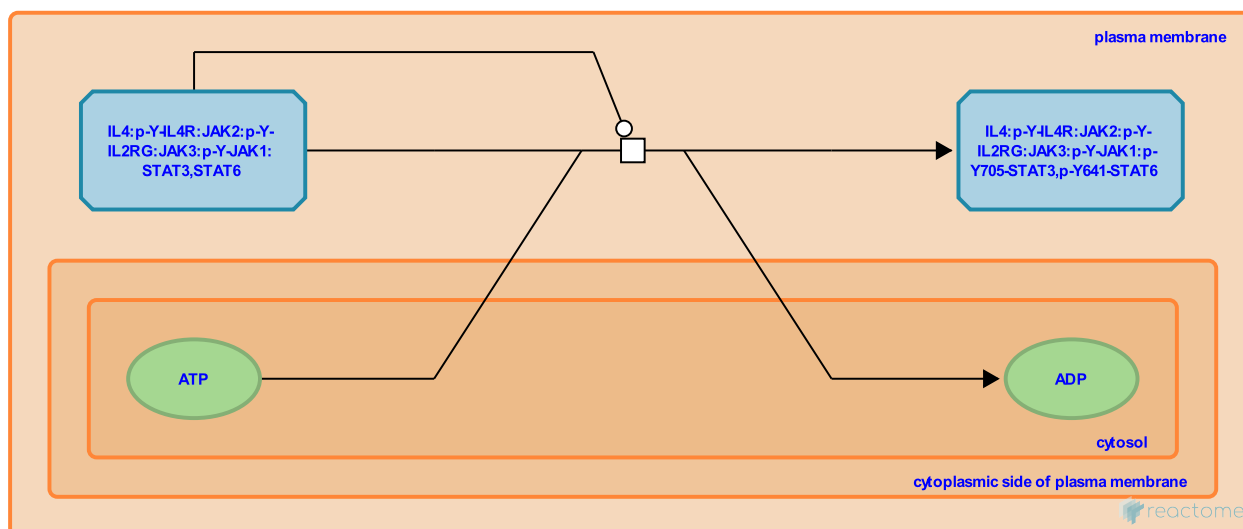
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786095

Type: transition

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [JAK1 phosphorylates STAT3,STAT6 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [STAT3,STAT6 bind p-Y-IL4R](#)

Followed by: [p-Y705-STAT3,p-Y641-STAT6 dissociate](#)

p-Y705-STAT3,p-Y641-STAT6 dissociate ↗

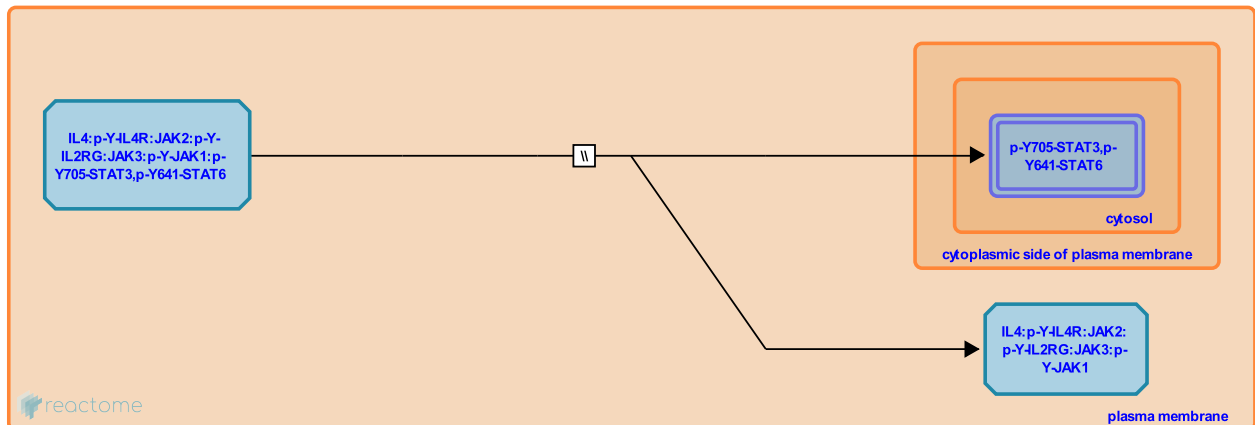
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786072

Type: omitted

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [p-Y705-STAT3,p-Y641-STAT6 dissociate \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [JAK1 phosphorylates STAT3,STAT6](#)

Followed by: [p-Y705-STAT3, p-Y641-STAT6 dimerise](#)

p-Y705-STAT3, p-Y641-STAT6 dimerise ↗

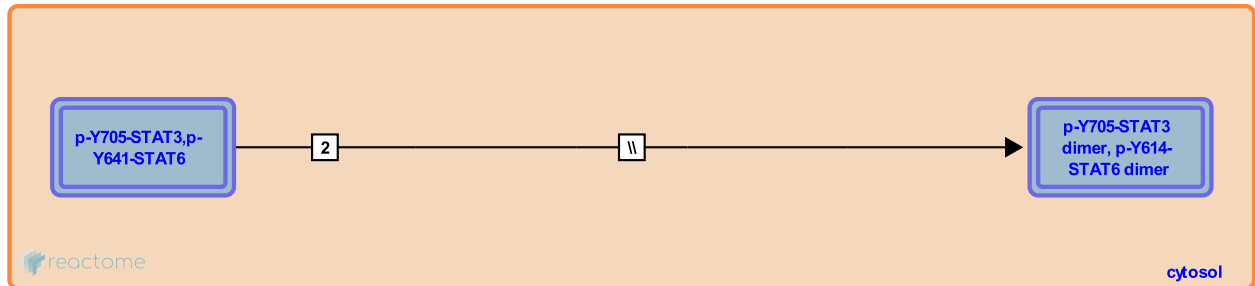
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786097

Type: omitted

Compartments: cytosol

Inferred from: [p-Y705-STAT3, p-Y641-STAT6 dimerise \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [p-Y705-STAT3, p-Y641-STAT6 dissociate](#)

Followed by: [p-Y705-STAT3 dimer, p-Y641-STAT6 dimer translocate to nucleus](#)

p-Y705-STAT3 dimer, p-Y641-STAT6 dimer translocate to nucleus ↗

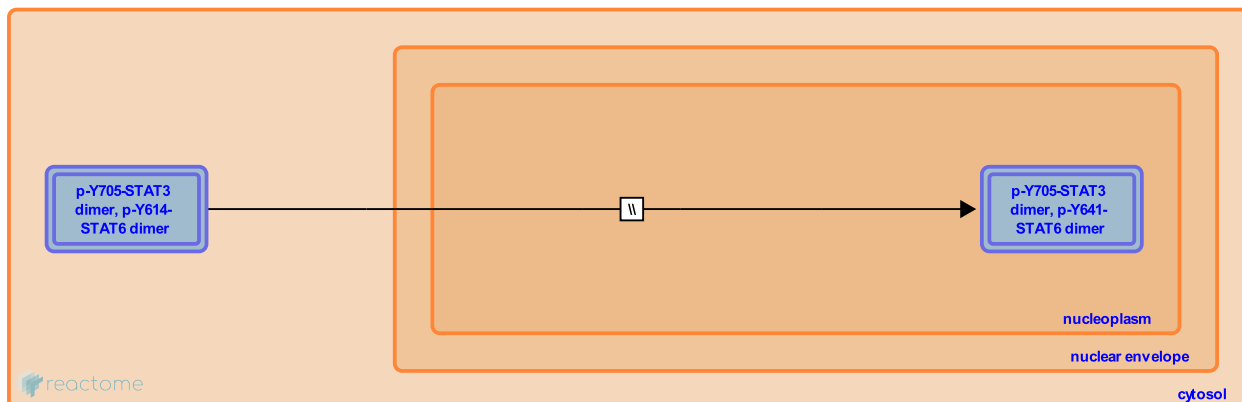
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786293

Type: omitted

Compartments: nucleoplasm, cytosol

Inferred from: [p-Y705-STAT3 dimer, p-Y641-STAT6 dimer translocate to nucleus \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [p-Y705-STAT3, p-Y641-STAT6 dimerise](#)

Followed by: [Expression of HSP90B1](#)

Expression of HSP90B1 ↗

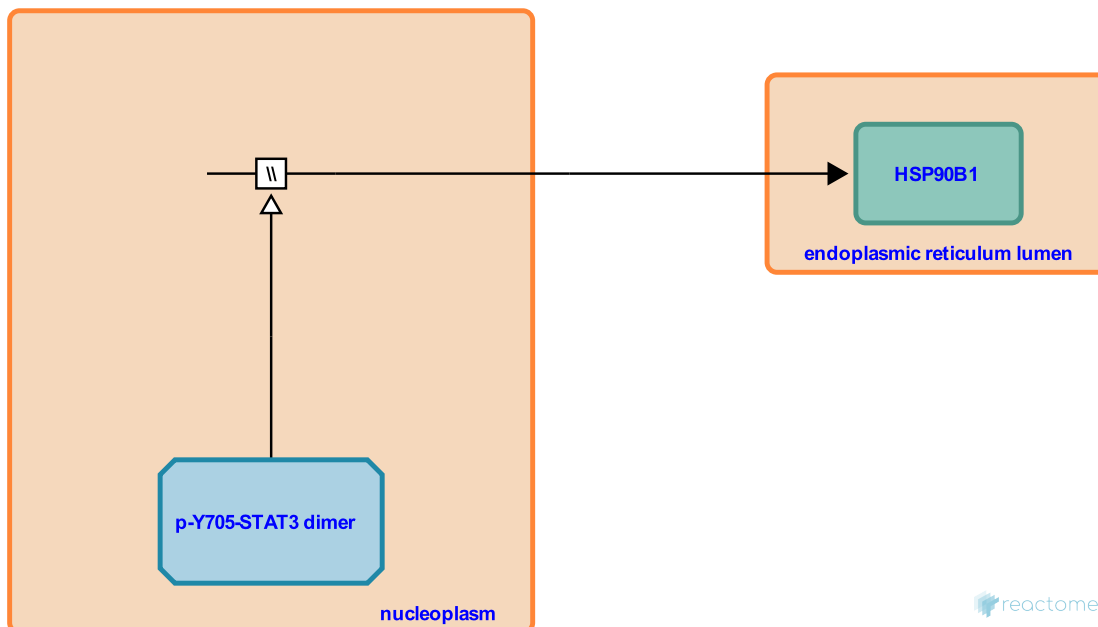
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6790038

Type: omitted

Compartments: nucleoplasm, endoplasmic reticulum lumen

Inferred from: [Expression of HSP90B1 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [p-Y705-STAT3 dimer](#), [p-Y641-STAT6 dimer translocate to nucleus](#)

SOCS5,(SOCS1) bind IL4RA ↗

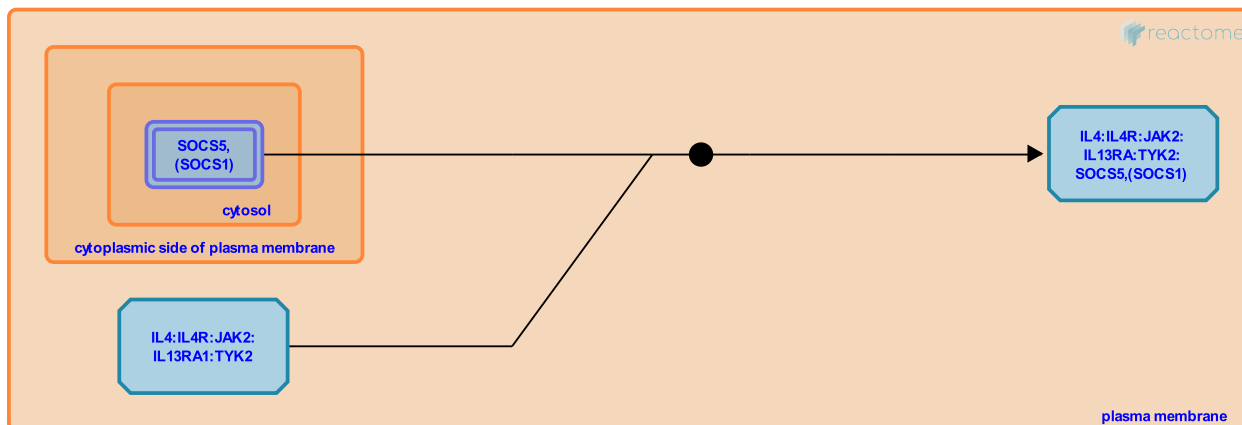
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6785821

Type: binding

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [SOCS5,\(SOCS1\) bind IL4RA \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL4:IL4R:JAK2 binds IL13RA1:TYK2](#)

IL13 binds IL13RA2 ↗

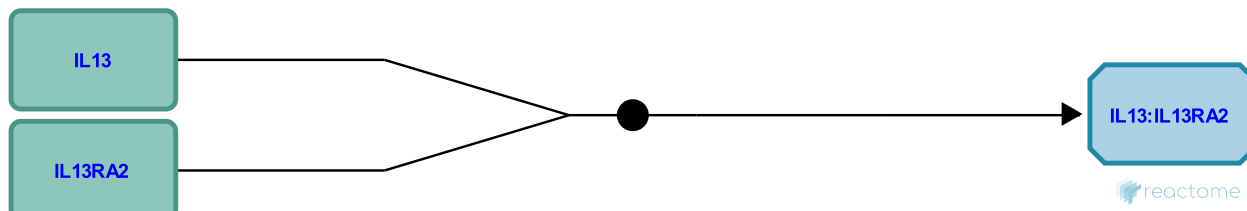
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-449818

Type: binding

Compartments: extracellular region

Inferred from: [IL13 binds IL13RA2 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

IL13 binds IL13RA:TYK2 ↗

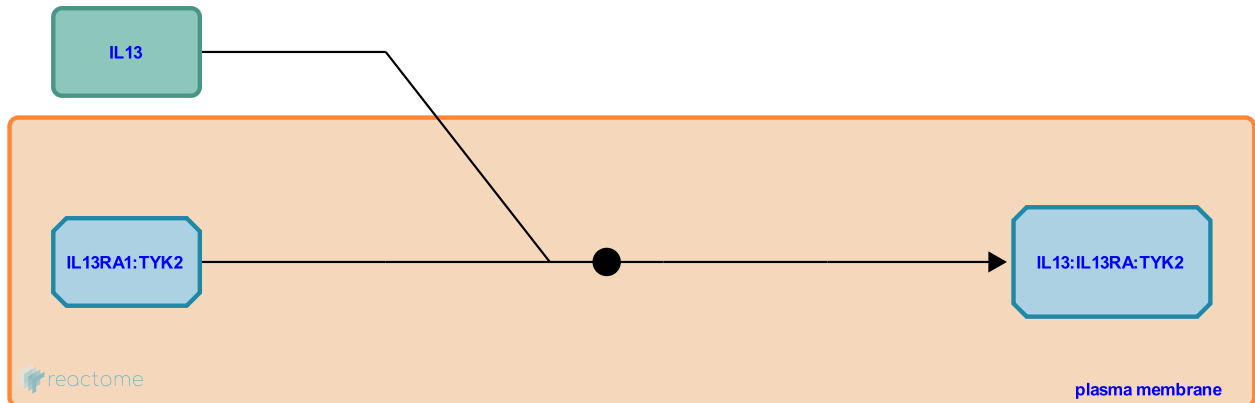
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786118

Type: binding

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [IL13 binds IL13RA:TYK2 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL13RA1 binds TYK2](#)

Followed by: [IL13:IL13RA:TYK2 binds IL4R:JAK2](#)

IL13:IL13RA:TYK2 binds IL4R:JAK2 ↗

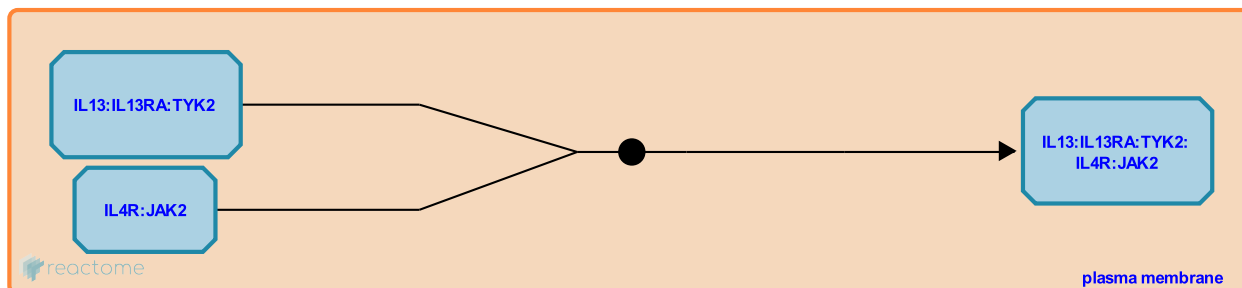
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786114

Type: binding

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [IL13:IL13RA:TYK2 binds IL4R:JAK2 \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL4R binds JAK2](#), [IL13 binds IL13RA:TYK2](#)

Followed by: [JAK1 binds IL4R in IL13-bound IL13R type II](#)

JAK1 binds IL4R in IL13-bound IL13R type II ↗

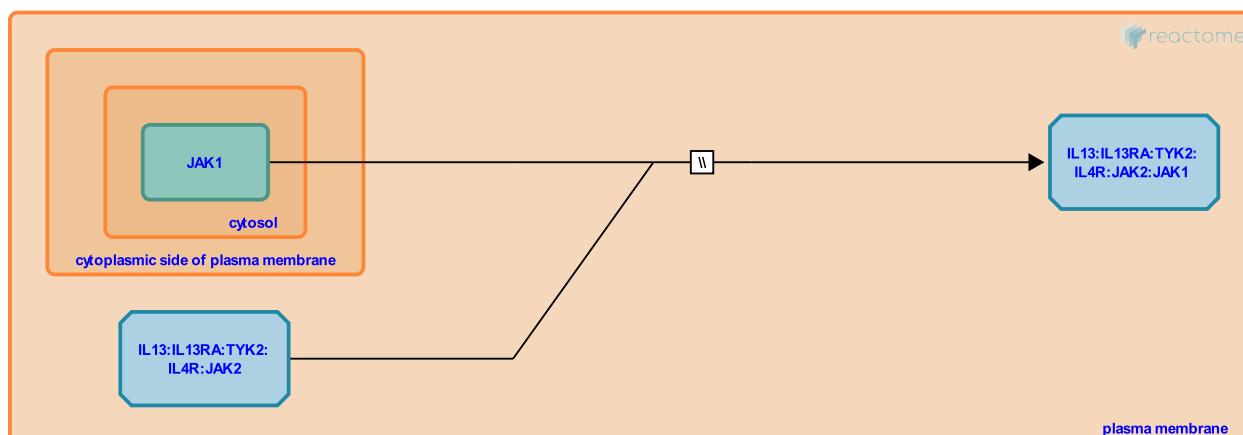
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786110

Type: omitted

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [JAK1 binds IL4R in IL13-bound IL13R type II \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL13:IL13RA:TYK2 binds IL4R:JAK2](#)

Followed by: [IL4R, IL13RA, JAK2 and TYK2 are tyrosine phosphorylated](#)

IL4R, IL13RA, JAK2 and TYK2 are tyrosine phosphorylated ↗

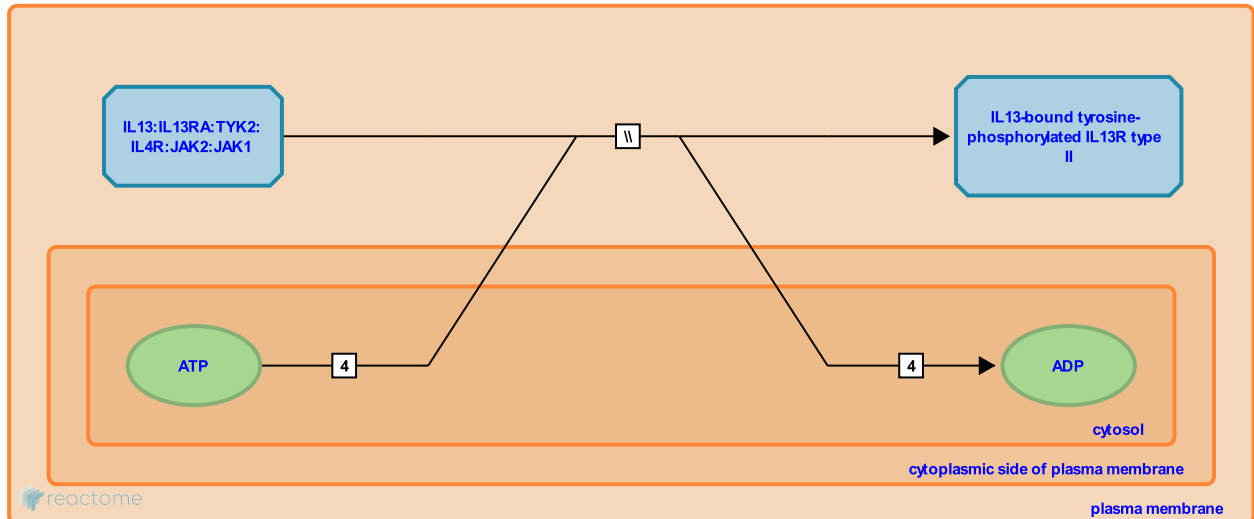
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6786050

Type: omitted

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [IL4R, IL13RA, JAK2 and TYK2 are tyrosine phosphorylated \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [JAK1 binds IL4R in IL13-bound IL13R type II](#)

Followed by: [STAT1,STAT3,STAT6 bind IL13:IL13R type II](#)

STAT1,STAT3,STAT6 bind IL13:IL13R type II ↗

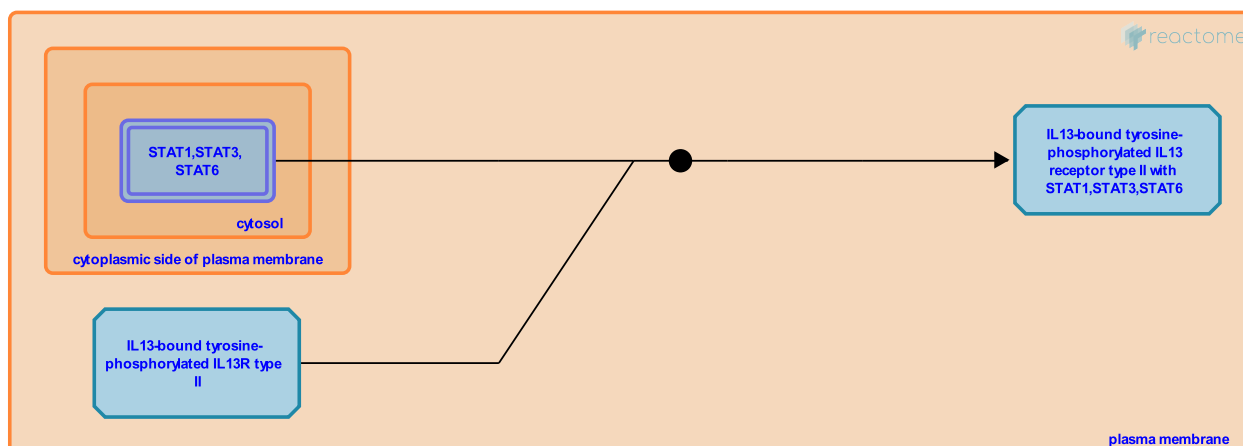
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6788571

Type: binding

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [STAT1,STAT3,STAT6 bind IL13:IL13R type II \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [IL4R, IL13RA, JAK2 and TYK2 are tyrosine phosphorylated](#)

Followed by: [STAT1,STAT3,STAT6 phosphorylation](#)

STAT1,STAT3,STAT6 phosphorylation ↗

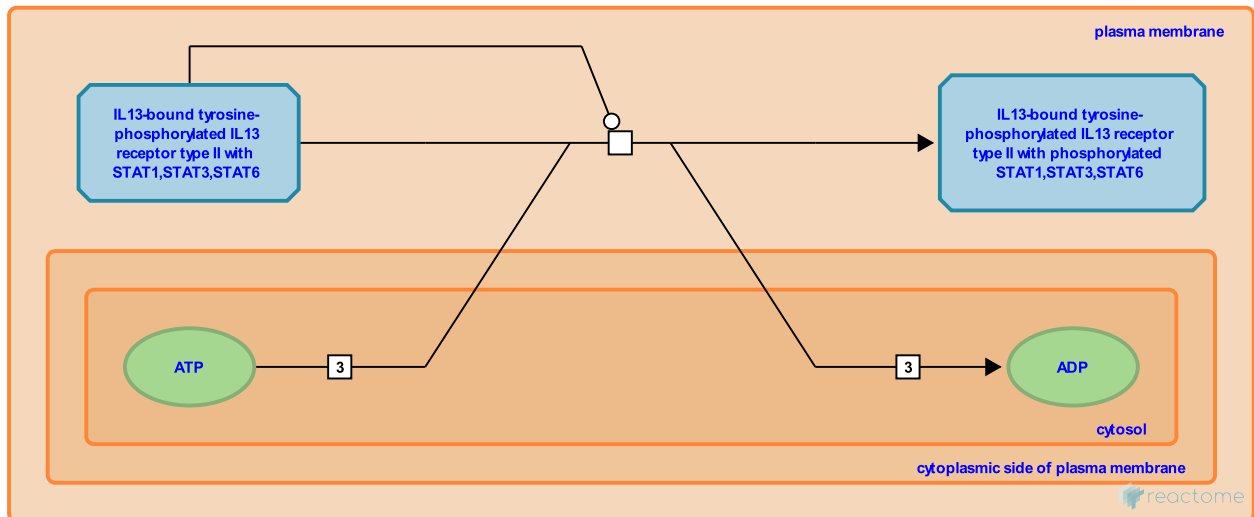
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6788582

Type: transition

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [STAT1,STAT3,STAT6 phosphorylation \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [STAT1,STAT3,STAT6 bind IL13:IL13R type II](#)

Followed by: [p-Y-STATs dissociate](#)

p-Y-STATs dissociate ↗

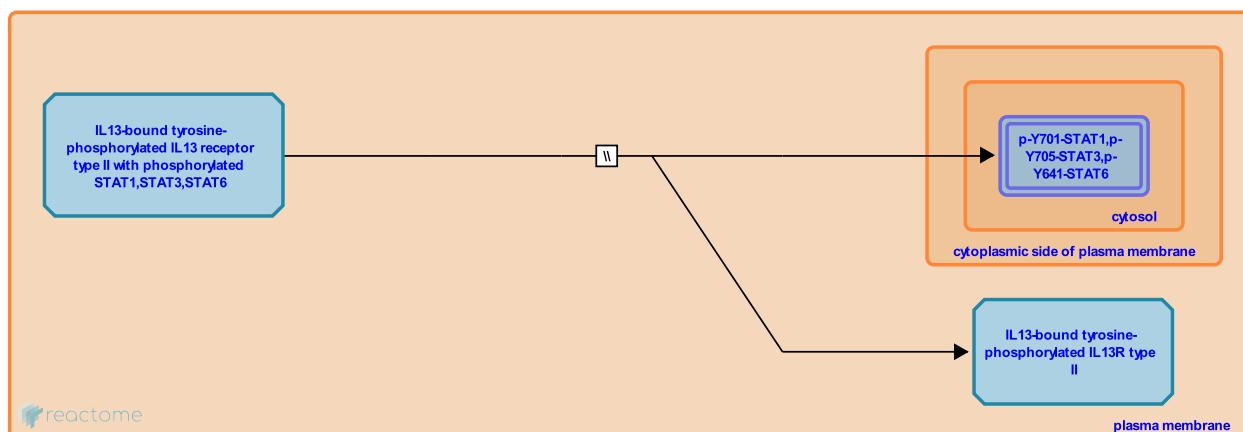
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6788628

Type: omitted

Compartments: plasma membrane, extracellular region, cytosol

Inferred from: [p-Y-STATs dissociate \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [STAT1,STAT3,STAT6 phosphorylation](#)

Followed by: [p-Y-STATs dimerize](#)

p-Y-STATs dimerize ↗

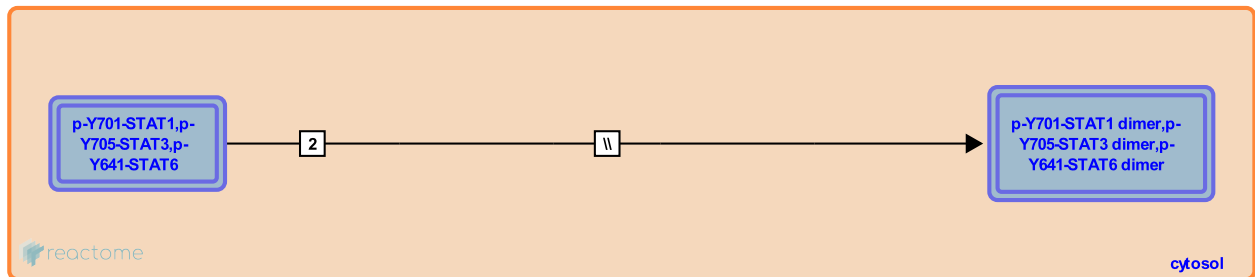
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6788622

Type: omitted

Compartments: cytosol

Inferred from: [p-Y-STATs dimerize \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [p-Y-STATs dissociate](#)

Followed by: [p-Y-STATs translocate to nucleus](#)

p-Y-STATs translocate to nucleus ↗

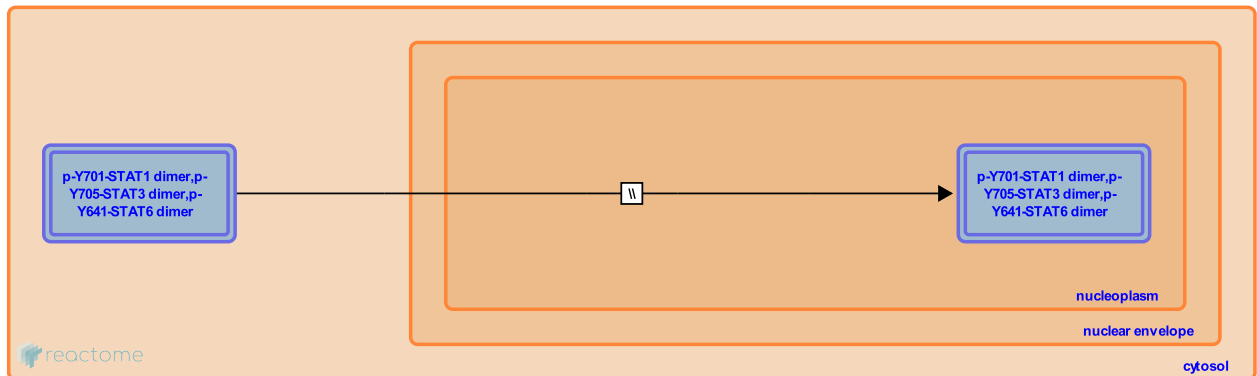
Location: [Interleukin-4 and Interleukin-13 signaling](#)

Stable identifier: R-BTA-6788623

Type: omitted

Compartments: nucleoplasm, cytosol

Inferred from: [p-Y-STATs translocate to nucleus \(Homo sapiens\)](#)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [p-Y-STATs dimerize](#)

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