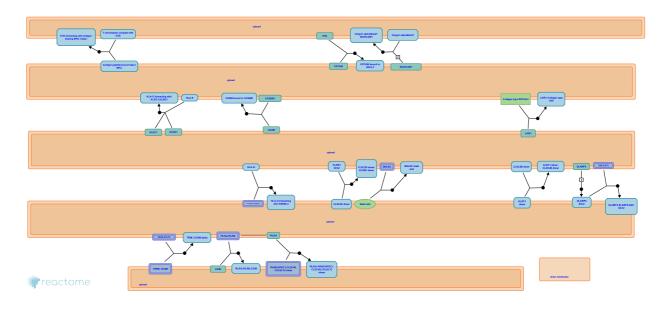


Immunoregulatory interactions between a

Lymphoid and a non-Lymphoid cell



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

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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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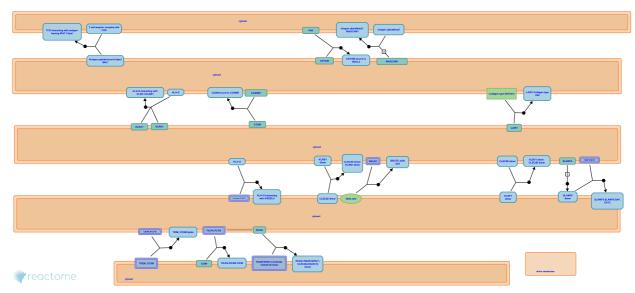
Reactome database release: 75

This document contains 1 pathway and 15 reactions (see Table of Contents)

Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell 7

Stable identifier: R-BTA-198933

Inferred from: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell (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.

TCR complex interacts with peptide antigen-presenting MHC Class I 7

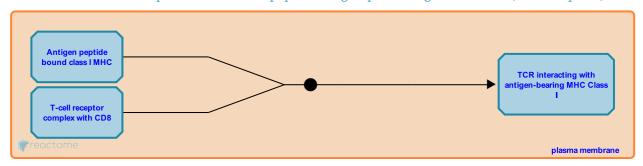
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-198955

Type: binding

Compartments: plasma membrane

Inferred from: TCR complex interacts with peptide antigen-presenting MHC Class I (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.

MADCAM1-1 binds Integrin alpha4beta7 **对**

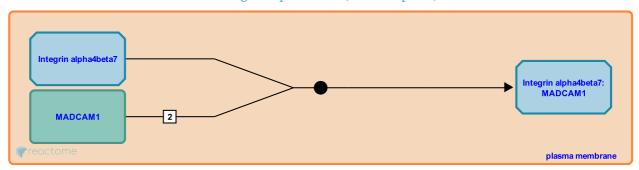
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-199032

Type: binding

Compartments: plasma membrane

Inferred from: MADCAM1-1 binds Integrin alpha4beta7 (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.

KLRC1:KLRD1 heterodimer interacts with HLA-E 7

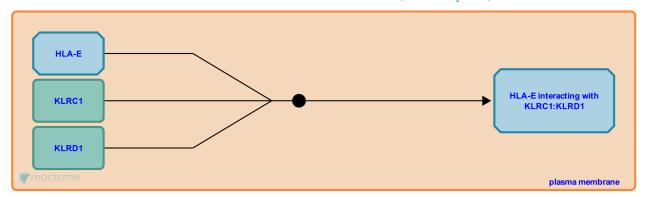
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-199062

Type: binding

Compartments: plasma membrane

Inferred from: KLRC1:KLRD1 heterodimer interacts with HLA-E (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.

CRTAM binds to NECL2

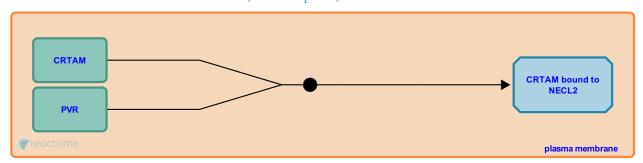
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-199112

Type: binding

Compartments: plasma membrane

Inferred from: CRTAM binds to NECL2 (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.

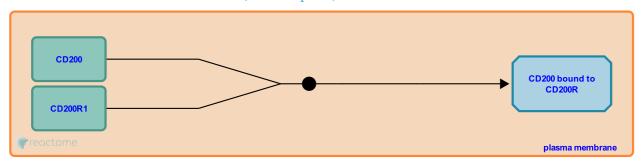
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-199154

Type: binding

Compartments: plasma membrane

Inferred from: CD200 binds to CD200R (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.

KIR2DL4 interacting with HLA-G ↗

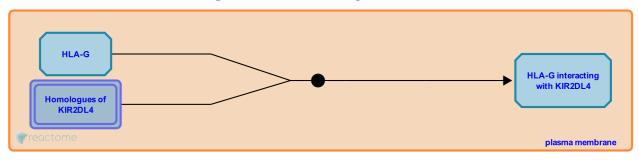
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-199579

Type: binding

Compartments: plasma membrane

Inferred from: KIR2DL4 interacting with HLA-G (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.

CLEC2D binds KLRB1 7

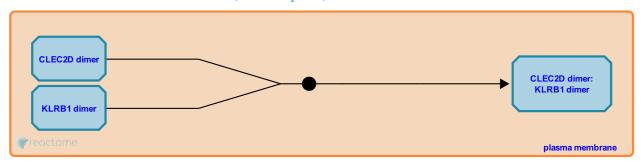
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-5685606

Type: binding

Compartments: plasma membrane

Inferred from: CLEC2D binds KLRB1 (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.

Sialic acid binds SIGLEC 7

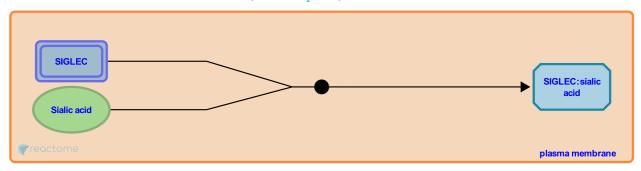
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-5685607

Type: binding

Compartments: plasma membrane

Inferred from: Sialic acid binds SIGLEC (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.

CLEC2B binds KLRF1 dimer 7

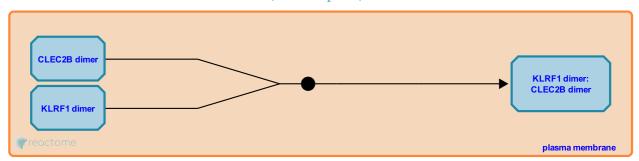
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-5685608

Type: binding

Compartments: plasma membrane

Inferred from: CLEC2B binds KLRF1 dimer (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.

SLAMF6 binds SLAMF6

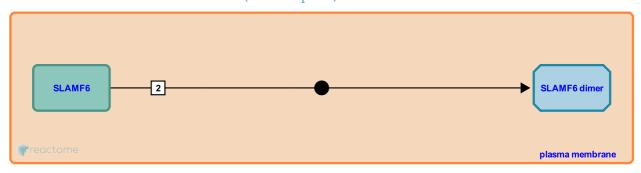
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-5685604

Type: binding

Compartments: plasma membrane

Inferred from: SLAMF6 binds SLAMF6 (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: SAP and EAT2 binds SLAMF6

SAP and EAT2 binds SLAMF6

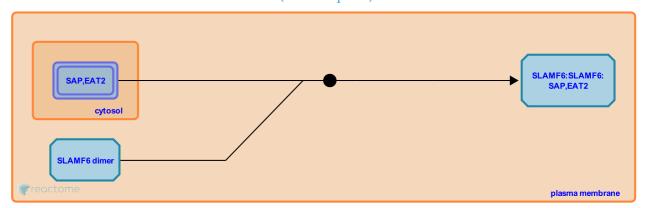
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-5685603

Type: binding

Compartments: plasma membrane, cytosol

Inferred from: SAP and EAT2 binds SLAMF6 (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: SLAMF6 binds SLAMF6

LAIR1 binds collagen 7

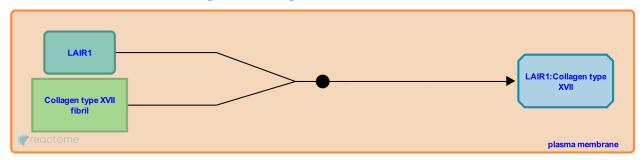
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-5686625

Type: binding

Compartments: plasma membrane

Inferred from: LAIR1 binds collagen (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.

TREM,CD300 binds lipids **↗**

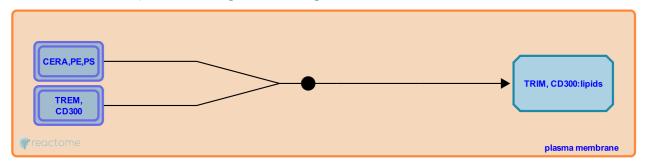
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-5696358

Type: binding

Compartments: plasma membrane

Inferred from: TREM, CD300 binds lipids (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.

PILRA binds PIANP, COLLEC12 trimer, NPDC1, CLEC4G

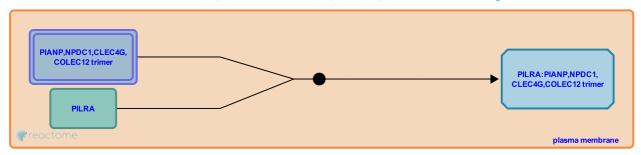
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-8862090

Type: binding

Compartments: plasma membrane

Inferred from: PILRA binds PIANP, COLLEC12 trimer, NPDC1, CLEC4G (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.

PILRA, PILRB bind CD99 **对**

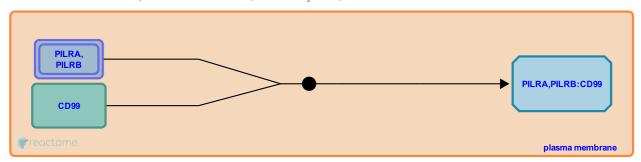
Location: Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell

Stable identifier: R-BTA-8862084

Type: binding

Compartments: plasma membrane

Inferred from: PILRA, PILRB bind CD99 (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.

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