Integrin cell surface interactions

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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


Reactome database release: 78

This document contains 1 pathway and 15 reactions (see Table of Contents)
Integrin cell surface interactions

Stable identifier: R-DME-216083

Inferred from: Integrin cell surface interactions (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/parologue (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
Collagen types III, IV, V, VI, VIII, IX, XVI bind integrins alpha1beta1 and alpha2beta1

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-2327695

**Type:** binding

**Compartments:** plasma membrane, extracellular region

**Inferred from:** Collagen types III, IV, V, VI, VIII, IX, XVI bind integrins alpha1beta1 and alpha2beta1 (Homo sapiens)

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

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More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp
**Arresten binds integrin alpha1beta1**

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-4084912

**Type:** binding

**Compartments:** plasma membrane

**Inferred from:** Arresten binds integrin alpha1beta1 (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](http://www.pantherdb.org/about.jsp)
Tumstatin binds integrin alphaVbeta 3, alpha3beta1

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-4085083

**Type:** binding

**Compartments:** plasma membrane, extracellular region

**Inferred from:** Tumstatin binds integrin alphaVbeta 3, alpha3beta1 (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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Tetrastatin binds integrin alphaVbeta3

Location: Integrin cell surface interactions

Stable identifier: R-DME-4088218

Type: binding

Compartments: plasma membrane, extracellular region

Inferred from: Tetrastatin binds integrin alphaVbeta3 (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
THBS1 (Thrombospondin-1) binds Integrin alpha3beta1, alpha4beta1

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-265429

**Type:** binding

**Compartments:** plasma membrane, extracellular region

**Inferred from:** THBS1 (Thrombospondin-1) binds Integrin alpha3beta1, alpha4beta1 (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.

<a href='http://www.pantherdb.org/about.jsp' target='NEW'>More details and caveats of the event inference in Reactome. For details on PANTHER see also: </a>
Integrins alpha4beta1, alpha8beta1, alphaVbeta1, alphaVbeta3, alphaVbeta6 bind Fibronectin matrix ↗

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-216050

**Type:** binding

**Compartments:** plasma membrane, extracellular region

**Inferred from:** Integrins alpha4beta1, alpha8beta1, alphaVbeta1, alphaVbeta3, alphaVbeta6 bind Fibronectin matrix (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.

<a href='/electronic_inference_compara.html' target='NEW'>More details and caveats of the event inference in Reactome. For details on PANTHER see also: <a href='http://www.pantherdb.org/about.jsp' target='NEW'>http://www.pantherdb.org/about.jsp</a>
ITGA4:ITGB1 binds natalizumab

Location: Integrin cell surface interactions

Stable identifier: R-DME-9679740

Type: binding

Compartments: plasma membrane, extracellular region

Inferred from: ITGA4:ITGB1 binds natalizumab (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/parologue (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
VTN (vitronectin) binds Integrin alphaVbeta3, alphaVbeta5, alphaVbeta8

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-216076

**Type:** binding

**Compartments:** plasma membrane, extracellular region

**Inferred from:** VTN (vitronectin) binds Integrin alphaVbeta3, alphaVbeta5, alphaVbeta8 (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
BSG (basigin) binds Integrin alpha3beta1, alpha6beta1

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-204434

**Type:** binding

**Compartments:** plasma membrane

**Inferred from:** BSG (basigin) binds Integrin alpha3beta1, alpha6beta1 (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.

[a href="/electronic_inference_compara.html" target='NEW']More details and caveats of the event inference in Reactome. For details on PANTHER see also: [a href='http://www.pantherdb.org/about.jsp' target='NEW']http://www.pantherdb.org/about.jsp
Interaction of integrin alphaVbeta3 with von Willbrand Factor

Location: Integrin cell surface interactions

Stable identifier: R-DME-265425

Type: binding

Compartments: plasma membrane, extracellular region

Inferred from: Interaction of integrin alphaVbeta3 with von Willbrand Factor (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
Interaction of integrin alphaEbeta7 with Cadherin-1

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-265422

**Type:** binding

**Compartments:** plasma membrane

**Inferred from:** Interaction of integrin alphaEbeta7 with Cadherin-1 (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
Interaction of integrin alphaIIbbeta3 with Fibronectin

Location: Integrin cell surface interactions

Stable identifier: R-DME-349593

Type: binding

Compartments: plasma membrane, extracellular region

Inferred from: Interaction of integrin alphaIIbbeta3 with Fibronectin (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
Interaction of integrin alphaIIbbeta3 with von Willebrand factor

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-216072

**Type:** binding

**Compartments:** plasma membrane, extracellular region

**Inferred from:** Interaction of integrin alphaIIbbeta3 with von Willebrand factor (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](http://www.pantherdb.org/about.jsp)
Interaction of integrin alphaIIb beta 3 with THBS1 (Thrombospondin-1)

Location: Integrin cell surface interactions

Stable identifier: R-DME-349603

Type: binding

Compartments: plasma membrane, extracellular region

Inferred from: Interaction of integrin alphaIIb beta 3 with THBS1 (Thrombospondin-1) (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
LUM (lumican) binds integrin alpha2beta1

**Location:** Integrin cell surface interactions

**Stable identifier:** R-DME-4085133

**Type:** binding

**Compartments:** plasma membrane, extracellular region

**Inferred from:** LUM (lumican) binds integrin alpha2beta1 (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.](https://reactome.org/electronic_inference_compara.html) For details on PANTHER see also: [http://www.pantherdb.org/about.jsp](http://www.pantherdb.org/about.jsp)
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