SUMOylation of SUMOylation proteins

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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.

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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: 82

This document contains 1 pathway and 5 reactions (see Table of Contents)
SUMOylation of SUMOylation proteins

Stable identifier: R-MMU-4085377

Compartments: nucleoplasm, nuclear envelope

Inferred from: SUMOylation of SUMOylation proteins (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

https://reactome.org
SUMOylation of PIAS4 with SUMO1

Location: SUMOylation of SUMOylation proteins

Stable identifier: R-MMU-3968362

Type: transition

Compartments: nucleoplasm

Inferred from: SUMOylation of PIAS4 with SUMO1 (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
RANBP2 SUMOylates RANBP2 with SUMO1

Location: SUMOylation of SUMOylation proteins

Stable identifier: R-MMU-4551649

Type: transition

Compartments: nuclear envelope, nucleoplasm

Inferred from: RANBP2 SUMOylates RANBP2 with SUMO1 (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
**RANBP2 SUMOylates RANBP2 with SUMO2**

**Location:** SUMOylation of SUMOylation proteins

**Stable identifier:** R-MMU-4551679

**Type:** transition

**Compartments:** nuclear envelope, nucleoplasm

**Inferred from:** RANBP2 SUMOylates RANBP2 with SUMO2 (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)
SUMOylation of TOPORS with SUMO1

**Location:** SUMOylation of SUMOylation proteins

**Stable identifier:** R-MMU-4551683

**Type:** transition

**Compartments:** nucleoplasm

**Inferred from:** SUMOylation of TOPORS with SUMO1 (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
SUMOylation of UBE2I with SUMO1

**Location:** SUMOylation of SUMOylation proteins

**Stable identifier:** R-MMU-4085350

**Type:** transition

**Compartments:** nucleoplasm

**Inferred from:** SUMOylation of UBE2I with SUMO1 (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
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