

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

- Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142. [↗](#)
- 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: 82

This document contains 1 pathway and 8 reactions ([see Table of Contents](#))

LRRC14 binds IKBKB and CHUK ↗

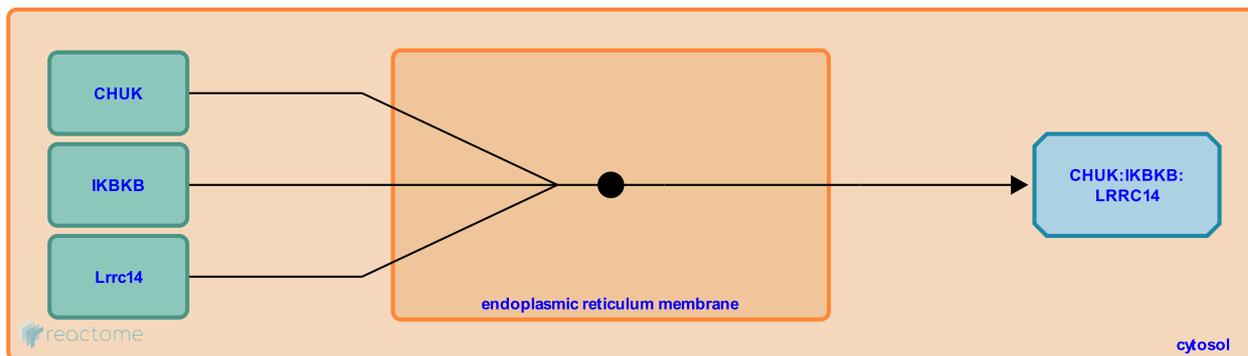
Location: [Regulation of NF-kappa B signaling](#)

Stable identifier: R-RNO-9749505

Type: binding

Compartments: endoplasmic reticulum membrane, cytosol

Inferred from: [LRRC14 binds IKBKB and CHUK \(Homo sapiens\)](#)



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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

NLRX1 binds CHUK:IKBKB:IKBKG ↗

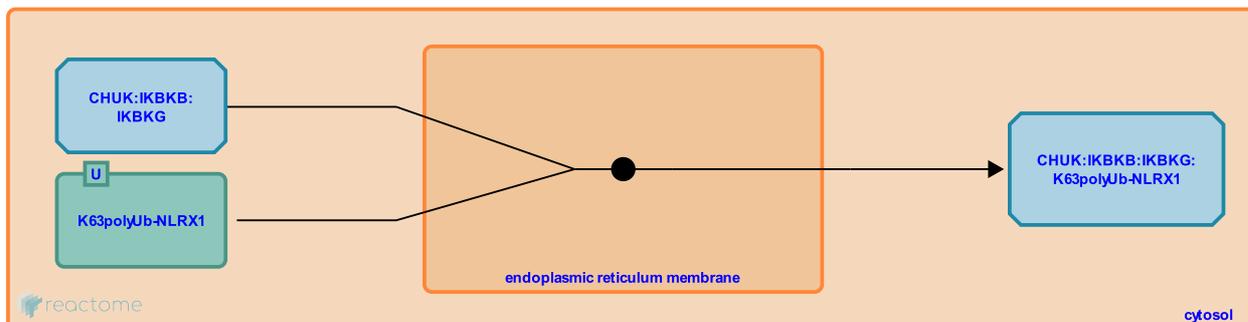
Location: [Regulation of NF-kappa B signaling](#)

Stable identifier: R-RNO-9749471

Type: binding

Compartments: endoplasmic reticulum membrane, cytosol

Inferred from: [NLRX1 binds CHUK:IKBKB:IKBKG \(Homo sapiens\)](#)



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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NLRC5 binds IKBKB and CHUK ↗

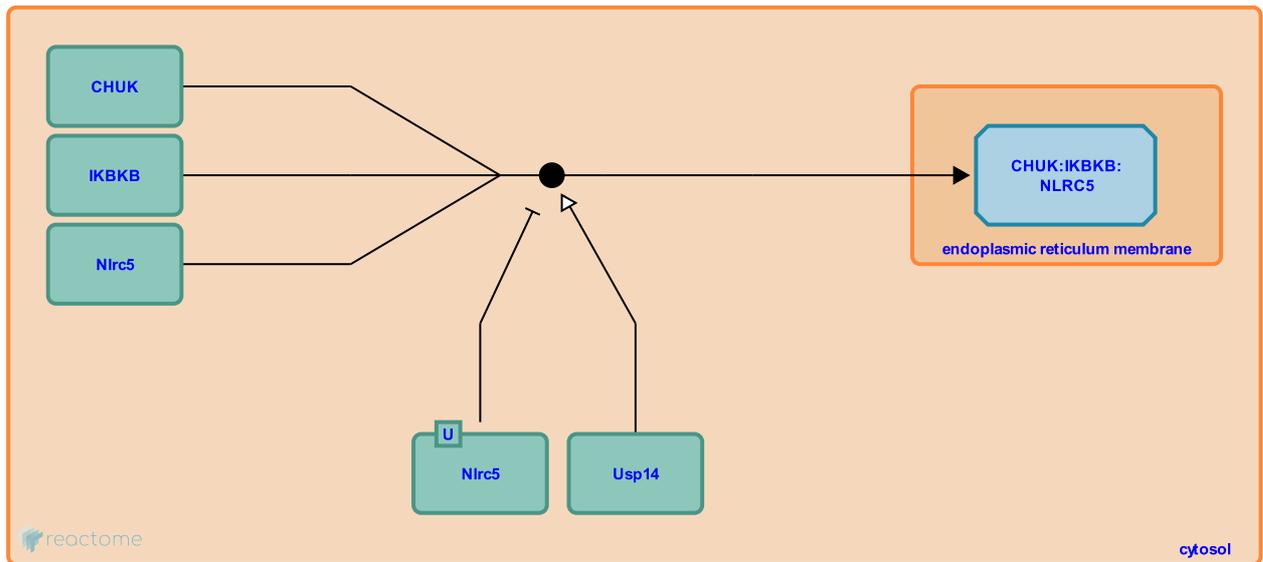
Location: [Regulation of NF-kappa B signaling](#)

Stable identifier: R-RNO-9750226

Type: binding

Compartments: cytosol

Inferred from: [NLRC5 binds IKBKB and CHUK \(Homo sapiens\)](#)



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

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Preceded by: [USP14 deubiquitinates NLRC5](#)

Followed by: [TRAF2,6 ubiquitinates NLRC5](#)

TRAF2,6 ubiquitinates NLRC5 ↗

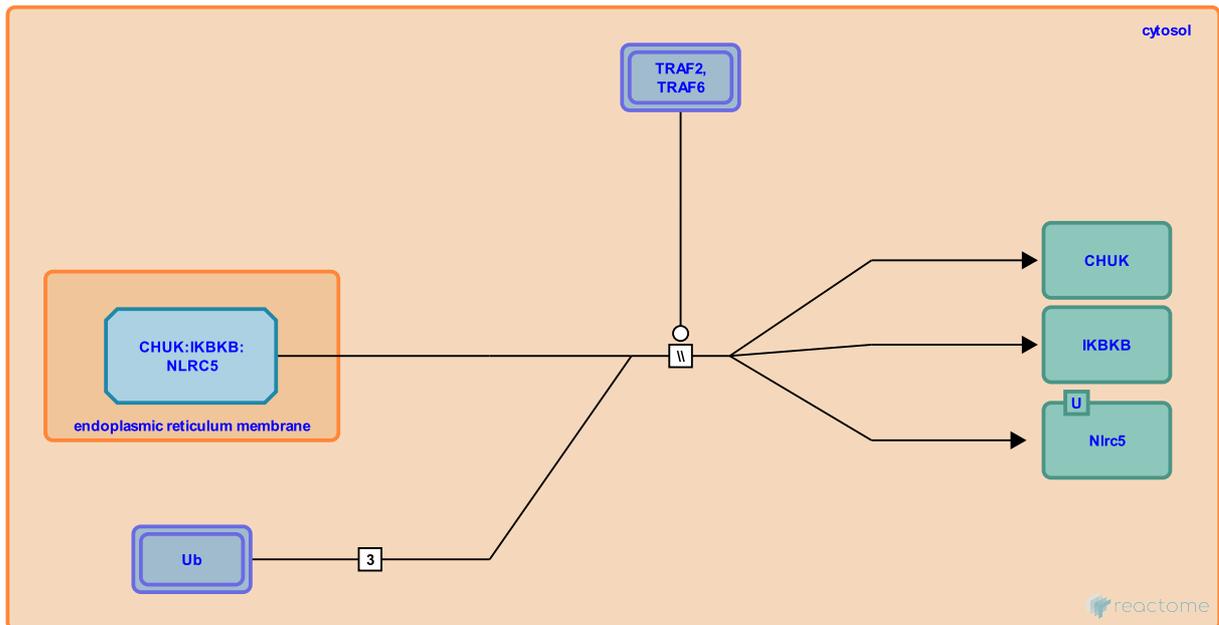
Location: [Regulation of NF-kappa B signaling](#)

Stable identifier: R-RNO-9750946

Type: omitted

Compartments: cytosol

Inferred from: [TRAF2,6 ubiquitinates NLRC5 \(Homo sapiens\)](#)



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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Preceded by: [NLRC5 binds IKBKB and CHUK](#)

Followed by: [USP14 deubiquitinates NLRC5](#)

USP18 binds IKBKG within IKK complex ↗

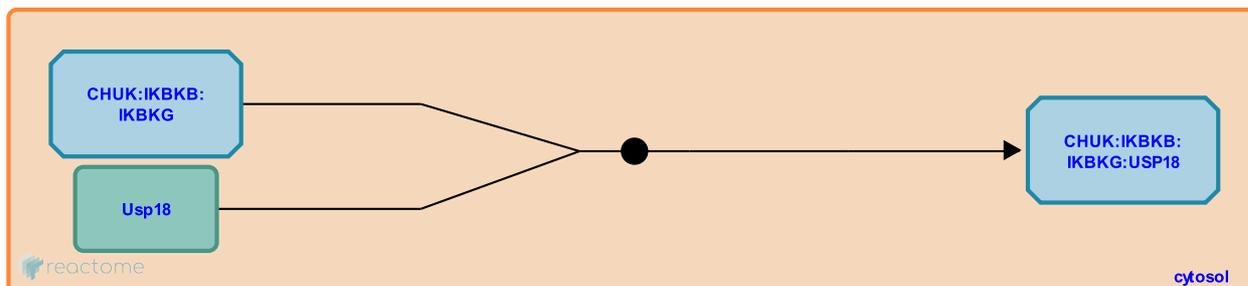
Location: Regulation of NF-kappa B signaling

Stable identifier: R-RNO-9761344

Type: binding

Compartments: cytosol

Inferred from: USP18 binds IKBKG within IKK complex (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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N4BP1 binds IKBKG ↗

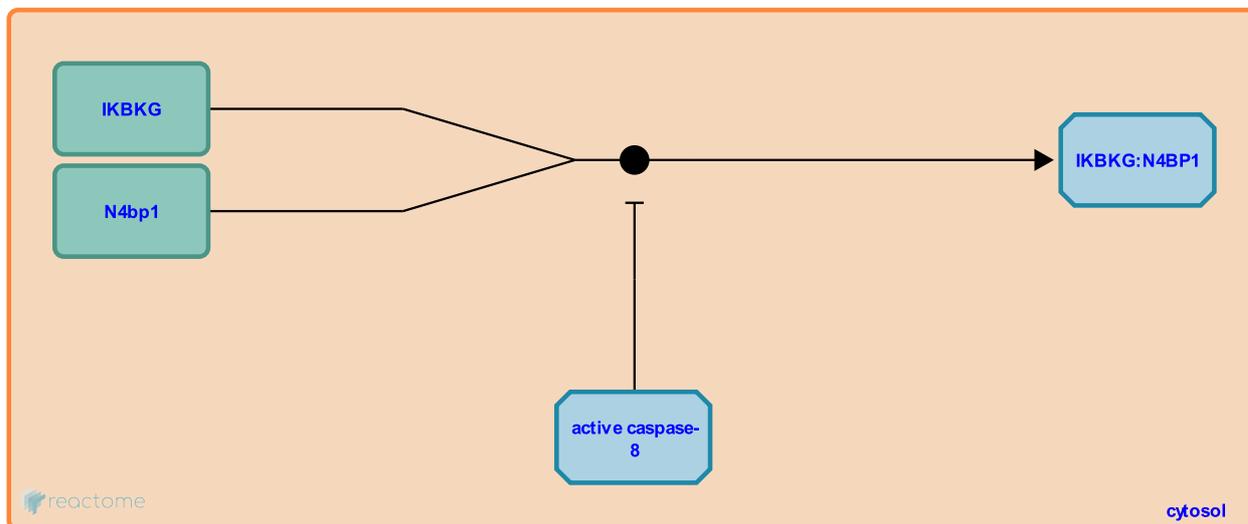
Location: Regulation of NF-kappa B signaling

Stable identifier: R-RNO-9757954

Type: binding

Compartments: cytosol

Inferred from: N4BP1 binds IKBKG (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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CASP8 cleaves N4BP1 at D424, D490 ↗

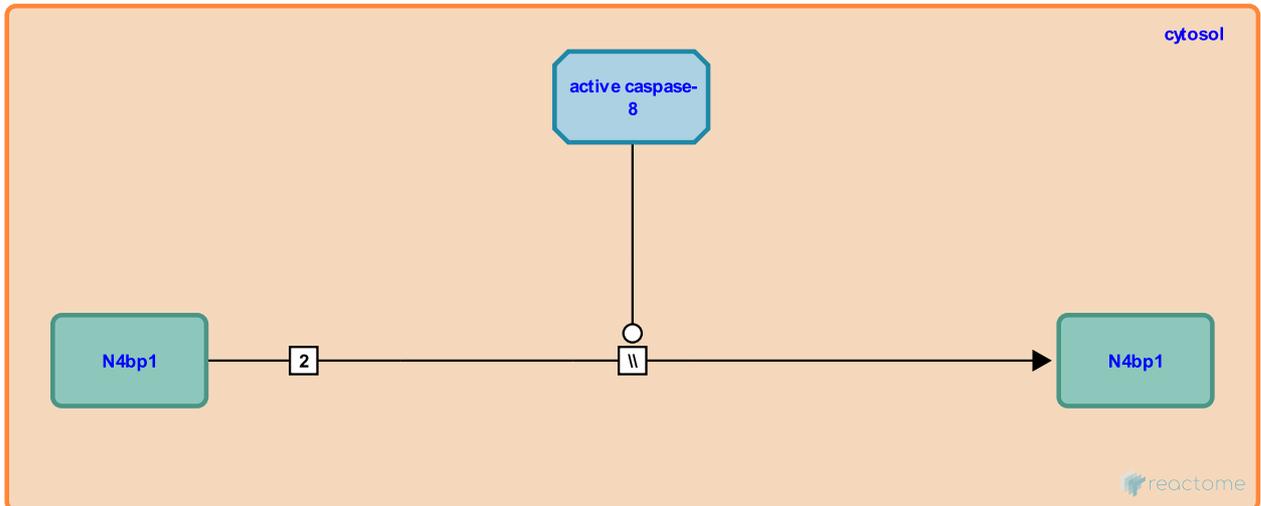
Location: [Regulation of NF-kappa B signaling](#)

Stable identifier: R-RNO-9757951

Type: omitted

Compartments: cytosol

Inferred from: [CASP8 cleaves N4BP1 at D424, D490 \(Homo sapiens\)](#)



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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

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