

26S proteasome processes K48PolyUb- K21,22-p-S32,36-IkBA:NF-kB complex to form NF-kB complex

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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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- 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: 70

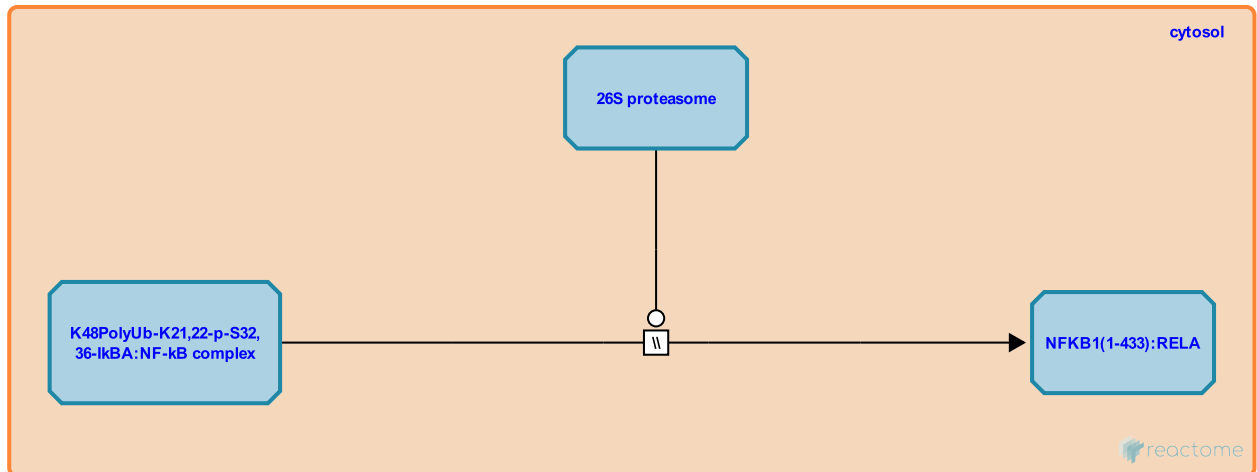
This document contains 1 reaction ([see Table of Contents](#))

26S proteasome processes K48PolyUb-K21,22-p-S32,36-IkBA:NF-kB complex to form NF-kB complex ↗

Stable identifier: R-HSA-5607724

Type: omitted

Compartments: cytosol



Following ubiquitination Ikappa B-alpha (IKBA) is rapidly degraded by 26S-proteasome, allowing NF-kB to translocate into the nucleus where it activates gene transcription (Spencer et al. 1999).

Literature references

Kroll, M., Conconi, M., Desterro, MJ., Marin, A., Thomas, D., Friguet, B. et al. (1997). The carboxy-terminus of I kappaB alpha determines susceptibility to degradation by the catalytic core of the proteasome. *Oncogene*, 15, 1841-50. ↗

Editions

2014-07-14	Authored, Edited	Garapati, P V.
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