

# RANBP2 SUMOylates RANBP2 with SUMO1

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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. [↗](#)

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Reactome database release: 88

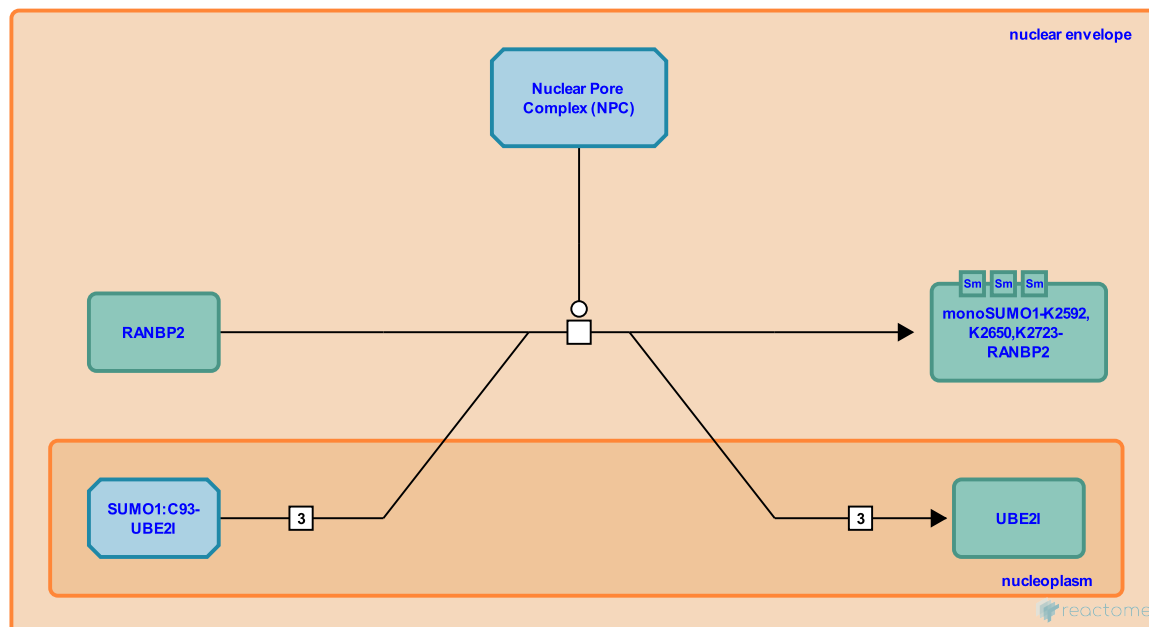
This document contains 1 reaction ([see Table of Contents](#))

## RANBP2 SUMOylates RANBP2 with SUMO1 [↗](#)

**Stable identifier:** R-HSA-4551649

**Type:** transition

**Compartments:** nuclear envelope, nucleoplasm



RANBP2 SUMOylates RANBP2 at lysine-2592, lysine-2650, and lysine-2723 with SUMO1 (Pichler et al. 2002, Pichler et al. 2004, Cooper et al. 2005). RANBP2 does not resemble HECT or RING type SUMO E3 ligases and instead uses hydrophobic interactions with UBE2I (UBC9) to catalyze SUMOylation.

### Literature references

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### Editions

2013-09-13	Authored, Edited	May, B.
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