

RNF41 ubiquitinates activated ERBB3

Matthews, L., Neckers, L.M., Orlic-Milacic, M., Xu, W.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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

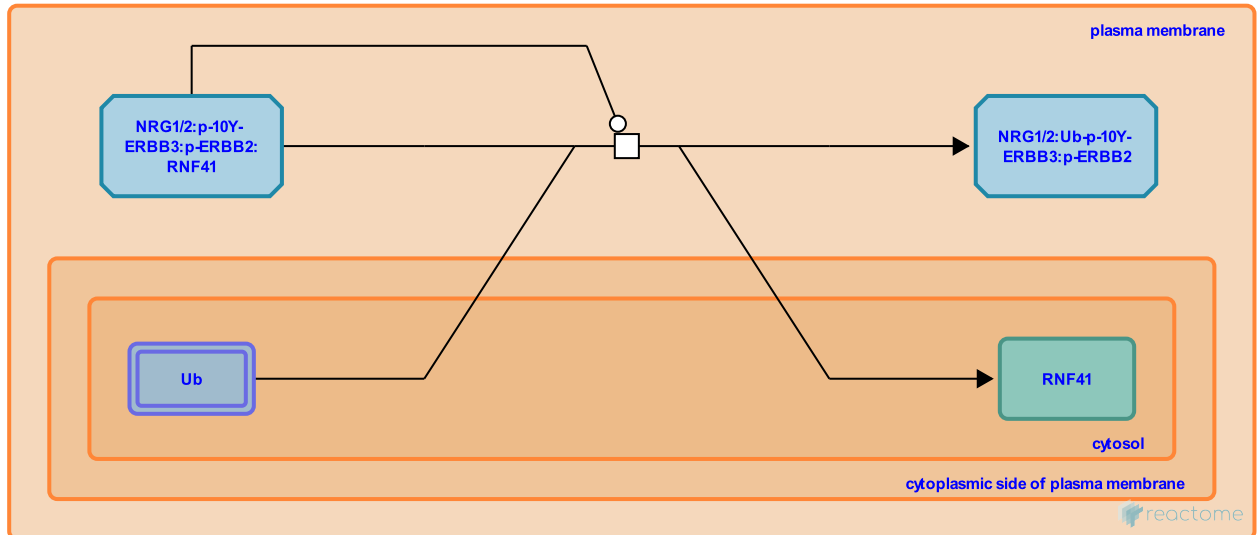
This document contains 1 reaction ([see Table of Contents](#))

RNF41 ubiquitinates activated ERBB3 [↗](#)

Stable identifier: R-HSA-1358792

Type: transition

Compartments: cytosol, extracellular region, plasma membrane



RNF41 ubiquitinates activated ERBB3, thereby downregulating ERBB3-mediated signaling. This reaction is part of a negative feedback loop in ERBB2:ERBB3 signaling.

Literature references

Carraway KL, 3rd., Cao, Z., Sweeney, C., Wu, X., Yen, L. (2007). Neuregulin-induced ErbB3 downregulation is mediated by a protein stability cascade involving the E3 ubiquitin ligase Nrdp1. *Mol Cell Biol*, 27, 2180-8. [↗](#)

Editions

2011-11-04	Authored	Orlic-Milacic, M.
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