

NBR1 binds ATM:Ub-p-PEX5:SQSTM1

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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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Reactome database release: 88

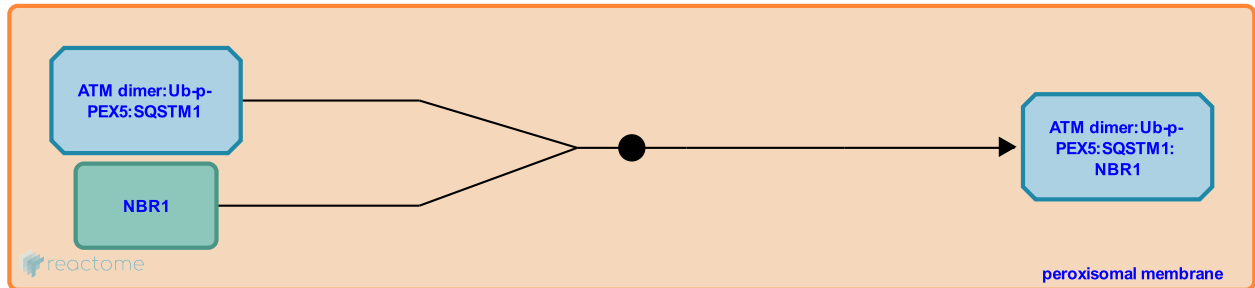
This document contains 1 reaction ([see Table of Contents](#))

NBR1 binds ATM:Ub-p-PEX5:SQSTM1 [↗](#)

Stable identifier: R-HSA-9664881

Type: binding

Compartments: peroxisomal membrane



As autophagy receptors, Next to BRCA1 gene 1 protein (NBR1) and Sequestosome 1 (SQSTM1) can cooperate to achieve pexophagy. SQSTM1 supports NBR1 to bind ubiquitinated peroxisomes through its UBA domain and enhances the efficiency of the degradation process (Kirkin V et al. 2009).

Literature references

Lamark, T., Johansen, T., Kirkin, V., Dikic, I. (2009). NBR1 cooperates with p62 in selective autophagy of ubiquitinated targets. *Autophagy*, 5, 732-3. [↗](#)

Editions

2019-10-29	Authored	Varusai, TM.
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