ATM dimer:PEX5 phosphorylates PEX5

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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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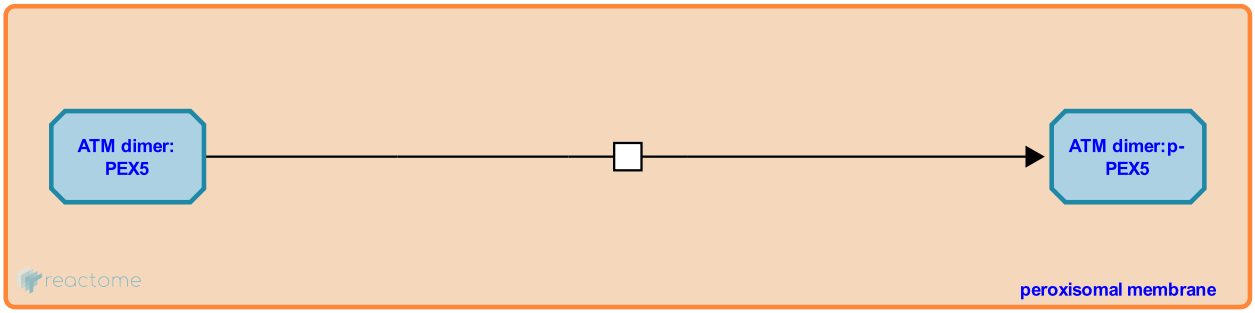
Stable identifier: R-HSA-9664862

Type: transition

Compartments: peroxisomal membrane



When serine/threonine kinase Ataxia telangiectasia mutated protein (ATM) is activated it can phosphorylate Peroxisomal targeting signal 1 receptor protein (PEX5) at Ser141 (Zhang J et al. 2015).

Literature references

Kim, J., Walker, CL., Pandita, TK., Charaka, VK., Jing, J., Dere, R. et al. (2015). ATM functions at the peroxisome to induce pexophagy in response to ROS. *Nat. Cell Biol., 17*, 1259-69.

Editions

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