

NRXNs bind SYTs

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https://reactome.org

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

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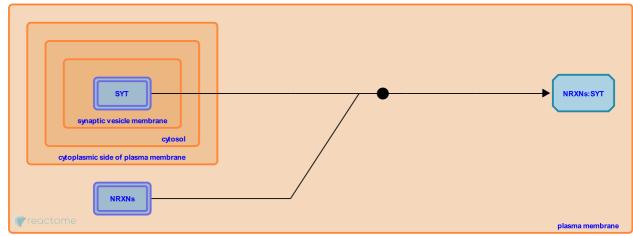
NRXNs bind SYTs **↗**

Stable identifier: R-HSA-6794348

Type: binding

Compartments: plasma membrane, synaptic vesicle membrane

Inferred from: Syt1 binds NRXNs (Bos taurus)



Synaptotagmins (SYTs) are transmembrane proteins involved in membrane trafficking and calcium-dependent exocytosis of synaptic vesicles at the synapse. SYTs may mediate this by binding to presynaptic proteins, the neurexins (NRXNs) (Perin 1994, Hata et al. 1993, Petrenko et al. 1991). The interaction between these two proteins may mediate part of the recognition of presynaptic active sites by synaptic vesicles or may regulate neurotransmitter release (Perin 1996).

Editions

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