

GluN1 (GRIN1) binds to ACTN2 at postsynaptic density

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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](#))

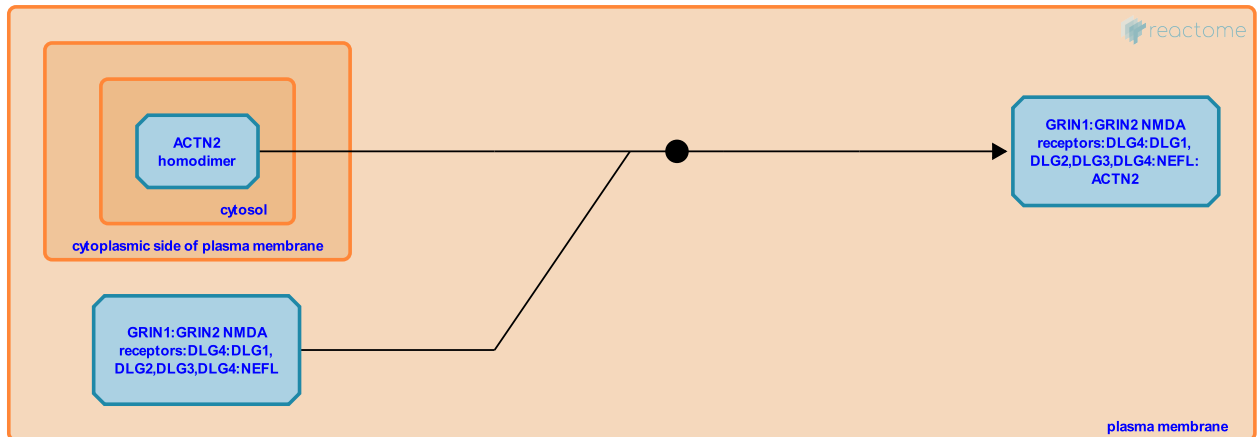
GluN1 (GRIN1) binds to ACTN2 at postsynaptic density ↗

Stable identifier: R-HSA-9611030

Type: binding

Compartments: plasma membrane, cytosol

Inferred from: [GluN1 \(Grin1\) binds to Actn2 \(Rattus norvegicus\)](#)



ACTN2 (alpha-actinin-2) directly binds to GluN1 (GRIN1) subunit of the NMDA receptor, but can also bind to GluN2B (GRIN2B) (Wyszynski et al. 1997). Binding to ACTN2 anchors NMDA receptors to the actin cytoskeleton and is needed for the assembly of the postsynaptic density (Wyszynski et al. 1997, Hodges et al. 2014).

Editions

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