GluN1:GluN2 (GRIN1:GRIN2) NMDA receptors traffic to the plasma membrane

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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


Reactome database release: 78

This document contains 1 reaction (see Table of Contents)
GluN1:GluN2 (GRIN1:GRIN2) NMDA receptors traffic to the plasma membrane

**Stable identifier:** R-HSA-9610750

**Type:** uncertain

**Compartments:** endoplasmic reticulum membrane, plasma membrane

NMDA receptors composed of GluN1 (GRIN1) and various combinations of GluN2 (GRIN2) subunits (GluN2A, GluN2B, GluN2C and GluN2D) are all delivered to the plasma membrane where they are anchored to postsynaptic density regions via the interaction with the PSD-95 family of proteins (DLG1, DLG2, DLG3 and DLG3) (Cui et al. 2007). Details of trafficking from the endoplasmic reticulum to the plasma membrane for the majority of GluN1:GluN2 di-heteromers and tri-heteromers, except for GluN1:GluN2B NMDA receptors, are not known.

**Literature references**


**Editions**

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