

Ca impermeable AMPA receptor ligand binding

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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

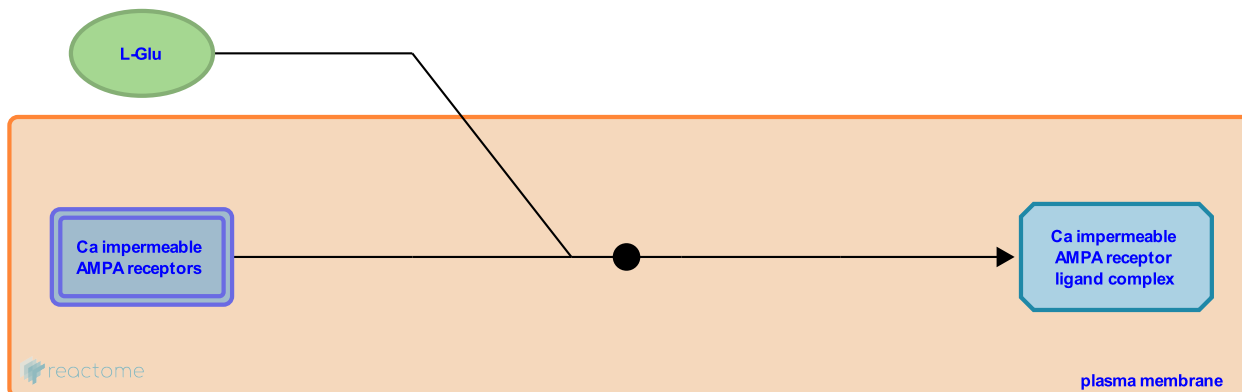
This document contains 1 reaction ([see Table of Contents](#))

Ca impermeable AMPA receptor ligand binding [↗](#)

Stable identifier: R-HSA-420975

Type: binding

Compartments: extracellular region, plasma membrane



AMPA receptors bind glutamate, released in the synaptic cleft by the presynaptic cell, in the ligand binding region in the N terminal domain.

Literature references

Keinänen, K., Jouppila, A., Koskelainen, S., Coleman, SK., Rivera, C., Korpi, ER. et al. (2009). Agonist occupancy is essential for forward trafficking of AMPA receptors. *J Neurosci*, 29, 303-12. [↗](#)

Niu, L., Li, G., Pei, W. (2003). Channel-opening kinetics of GluR2Q(flip) AMPA receptor: a laser-pulse photolysis study. *Biochemistry*, 42, 12358-66. [↗](#)

Editions

2008-01-14	Authored	Mahajan, SS.
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