

## **Anti-NMDAR2C Picoband Antibody**

**Catalog # ABO12065** 

## **Specification**

# **Anti-NMDAR2C Picoband Antibody - Product Information**

Application WB
Primary Accession Q14957
Host Reactivity Human, Rat
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Glutamate receptor ionotropic, NMDA 2C(GRIN2C) detection. Tested with WB in Human;Rat.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-NMDAR2C Picoband Antibody - Additional Information**

#### **Gene ID 2905**

#### **Other Names**

Glutamate receptor ionotropic, NMDA 2C, GluN2C, Glutamate [NMDA] receptor subunit epsilon-3, N-methyl D-aspartate receptor subtype 2C, NMDAR2C, NR2C, GRIN2C, NMDAR2C

# **Calculated MW**

134209 MW KDa

## **Application Details**

Western blot, 0.1-0.5 µg/ml, Rat, Human<br>

## **Subcellular Localization**

Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein.

### **Tissue Specificity**

Mainly expressed in brain with predominant expression is in the cerebellum, also present in the hippocampus, amygdala, caudate nucleus, corpus callosum, subthalamic nuclei and thalamus. Detected in the heart, skeletal muscle and pancreas.

### **Protein Name**

Glutamate receptor ionotropic, NMDA 2C

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

## **Immunogen**

E.coli-derived human NMDAR2C recombinant protein (Position: Q43-Q242). Human NMDAR2C



shares 93% and 92.5% amino acid (aa) sequence identity with mouse and rat NMDAR2C, respectively.

**Purification** 

Immunogen affinity purified.

**Cross Reactivity** 

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

## **Anti-NMDAR2C Picoband Antibody - Protein Information**

Name GRIN2C (HGNC:4587)

Synonyms NMDAR2C

#### **Function**

Component of N-methyl-D-aspartate (NMDA) receptors (NMDARs) that function as heterotetrameric, ligand-gated cation channels with high calcium permeability and voltage-dependent block by Mg(2+) (PubMed:<a

href="http://www.uniprot.org/citations/26875626" target="\_blank">26875626</a>, PubMed:<a href="http://www.uniprot.org/citations/36309015" target="\_blank">36309015</a>). Participates in synaptic plasticity for learning and memory formation by contributing to the slow phase of excitatory postsynaptic current and long-term synaptic potentiation (By similarity). Channel activation requires binding of the neurotransmitter L-glutamate to the GluN2 subunit, glycine or D-serine binding to the GluN1 subunit, plus membrane depolarization to eliminate channel inhibition by Mg(2+) (PubMed:<a href="http://www.uniprot.org/citations/26875626" target="\_blank">26875626" target="\_blank">26875626</a>, PubMed:<a href="http://www.uniprot.org/citations/36309015" target="\_blank">36309015</a>). NMDARs mediate simultaneously the potasium efflux and the influx of calcium and sodium (By similarity). Each GluN2 subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, Ca2(+) permeability, and binding to allosteric modulators (PubMed:<a href="http://www.uniprot.org/citations/26875626" target="blank">26875626</a>).

## **Cellular Location**

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein

#### **Tissue Location**

Mainly expressed in brain with predominant expression is in the cerebellum, also present in the hippocampus, amygdala, caudate nucleus, corpus callosum, subthalamic nuclei and thalamus. Detected in the heart, skeletal muscle and pancreas

## **Anti-NMDAR2C Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

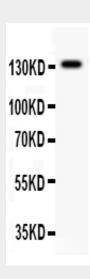




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- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-NMDAR2C Picoband Antibody - Images



Anti- NMDAR2C Picoband antibody, ABO12065, Western blottingAll lanes: Anti NMDAR2C (ABO12065) at 0.5ug/mlWB: Rat Brain Tissue Lysate at 50ugPredicted bind size: 134KDObserved bind size: 134KD

## Anti-NMDAR2C Picoband Antibody - Background

NMDAR2C, known as GRIN2C, is mapped to 17q25.1. Glutamate [NMDA] receptor subunit epsilon-3 is a protein that in humans is encoded by the GRIN2C gene. NMDA receptors are found in the central nervous system, are permeable to cations and have an important role in physiological processes such as learning, memory, and synaptic development. The receptor is a tetramer of different subunits (typically heterodimer of subunit 1 with one or more of subunits 2A-D), forming a channel that is permeable to calcium, potassium, and sodium, and whose properties are determined by subunit composition. Alterations in the subunit composition of the receptor are associated with pathophysiological conditions such as Parkinson's disease, Alzheimer's disease, depression, and schizophrenia. Alternative splicing results in multiple transcript variants.