

Anti-NMDAR2C Picoband Antibody

Catalog # ABO12065

Product Information

Application	WB
Primary Accession	Q14957
Host	Rabbit
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.

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
Application Details	Western blot, 0.1-0.5 µg/ml, Rat, Human
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.
Source	Eukaryota
Protein Name	Glutamate receptor ionotropic, NMDA 2C
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

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: 26875626 , PubMed: 36309015). 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: 26875626 , PubMed: 36309015). NMDARs mediate simultaneously the potassium 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: 26875626).
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

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.

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.