

Anti-NMDAR2C Antibody

Rabbit polyclonal antibody to NMDAR2C Catalog # AP61362

Product Information

ApplicationWB, IHCPrimary AccessionQ14957ReactivityHumanHostRabbitClonalityPolyclonalCalculated MW134209

Additional Information

Gene ID 2905

Other Names NMDAR2C; Glutamate receptor ionotropic NMDA 2C; GluN2C; Glutamate

[NMDA] receptor subunit epsilon-3; N-methyl D-aspartate receptor subtype

2C; NMDAR2C; NR2C

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human NMDAR2C. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/200) IHC~~WB (1/500 - 1/1000), IHC

(1/50 - 1/200)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name GRIN2C (<u>HGNC:4587</u>)

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 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: 26875626).

Cellular Location

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

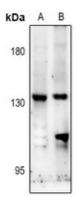
Tissue Location

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

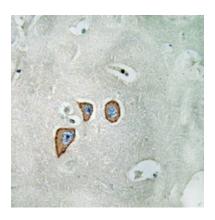
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NMDAR2C. The exact sequence is proprietary.

Images



Western blot analysis of NMDAR2C expression in U87MG (A), Panc1 (B) whole cell lysates.



Immunohistochemical analysis of NMDAR2C staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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