

Anti-NMDAR2C Antibody

Catalog # AP61362

Product Information

Application	WB, IHC
Primary Accession	Q14957
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	134209

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 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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](#)).

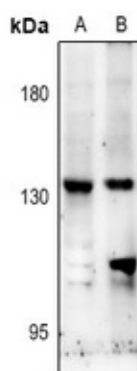
Cellular Location

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

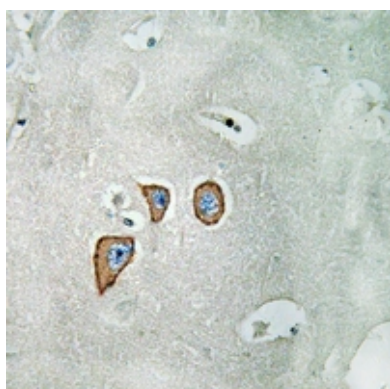
Tissue Location

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

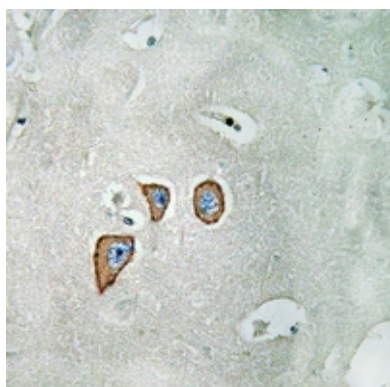
Images



Western blot analysis of NMDAR2C expression in U87MG (A), Panc1 (B) whole cell lysates. (Predicted band size: 134 kD; Observed band size: 134 kD)



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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