

GRIN2C Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19779c

Specification

GRIN2C Antibody (Center) - Product Information

Application WB.E **Primary Accession** 014957 NP 000826.2 Other Accession Reactivity Mouse Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 134209 Antigen Region 567-595

GRIN2C Antibody (Center) - 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

Target/Specificity

This GRIN2C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 567-595 amino acids from the Central region of human GRIN2C.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GRIN2C Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GRIN2C Antibody (Center) - Protein Information

Name GRIN2C

Synonyms NMDAR2C



Function Component of NMDA receptor complexes that function as heterotetrameric, ligand-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Channel activation requires binding of the neurotransmitter glutamate to the epsilon subunit, glycine binding to the zeta subunit, plus membrane depolarization to eliminate channel inhibition by Mg(2+) (PubMed:26875626). Sensitivity to glutamate and channel kinetics depend on the subunit composition (Probable). Plays a role in regulating the balance between excitatory and inhibitory activity of pyramidal neurons in the prefrontal cortex. Contributes to the slow phase of excitatory postsynaptic current, long-term synaptic potentiation, and learning (By similarity).

Cellular Location

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

Tissue Location

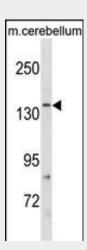
Mainly expressed in brain with predominant expression is in the cerebellum, also present in the hippocampus, amygdala, caudate nucleus, corpus callosum, subthalamic nuclei and thalamus. Detected in the heart, skeletal muscle and pancreas

GRIN2C Antibody (Center) - Protocols

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

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

GRIN2C Antibody (Center) - Images



GRIN2C Antibody (Center) (Cat. #AP19779c) western blot analysis in mouse cerebellum tissue lysates (35ug/lane). This demonstrates the GRIN2C antibody detected the GRIN2C protein (arrow).

GRIN2C Antibody (Center) - Background

N-methyl-D-aspartate (NMDA) receptors are a class of ionotropic glutamate receptors. NMDA channel has been shown to be





involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. NMDA receptor channels are heteromers composed of the key receptor subunit NMDAR1 (GRIN1) and 1 or more of the 4 NMDAR2 subunits: NMDAR2A (GRIN2A), NMDAR2B (GRIN2B), NMDAR2C (GRIN2C), and NMDAR2D (GRIN2D). [provided by RefSeq].

GRIN2C Antibody (Center) - References

Need, A.C., et al. Eur. J. Hum. Genet. 17(7):946-957(2009)
Tabakoff, B., et al. BMC Biol. 7, 70 (2009):
Shi, J., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 147B (7), 1270-1277 (2008):
Self, R.L., et al. Brain Res. 995(1):39-45(2004)
Krapivinsky, G., et al. Neuron 40(4):775-784(2003)