

GRIN2C Blocking Peptide (Center)
Synthetic peptide
Catalog # BP19779c**Specification****GRIN2C Blocking Peptide (Center) - Product Information**

Primary Accession [Q14957](#)
Other Accession [NP_000826.2](#)

GRIN2C Blocking Peptide (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

The synthetic peptide sequence is selected from aa 582-595 of HUMAN GRIN2C

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GRIN2C Blocking Peptide (Center) - Protein Information

Name GRIN2C

Synonyms NMDAR2C

Function

GRIN2C Blocking Peptide (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 Blocking Peptide (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)

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. Cell junction, synapse, 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 Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)