Phospho-Glur2 (Ser843) Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	GluR2, Blocking Peptide
Full Product Name	Phospho-GluR2 (Ser843) Blocking Peptide
Product Gene Name	GluR2 blocking peptide
Product Synonym Gene Name	GRIA2
Product Synonym Names	AMPA 2; AMPA selective glutamate receptor 2; AMPA-selective glutamate receptor 2; AMPA2; GluA2; GLUR 2; GLUR B; GluR K2; GluR-2; GluR-B; GluR-K2; GLUR2; GLURB; Glutamate receptor 2; Glutamate receptor ionotropic AMPA 2; Glutamate receptor ionotropic; Gria2; GRIA2_HUMAN; HBGR2
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	GluR2 (Ser843) peptide (MBS9616017) is used for blocking the activity of GluR2 (Ser843) antibody (MBS9612736)
Molecular Weight	98,821 Da
Chromosome Location	Chromosome: 4; NC_000004.11 (158141736..158287227). Location: 4q32.1
OMIM	138247
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for GluR2 blocking peptide	Blocking/Control
Related Product Information for GluR2 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of GluR2 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for GluR2 purchase	MBS9616017 is a blocking peptide targeting GluR2. Also known as Phospho-GluR2 (Ser843) Blocking Peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GluR2. It may not necessarily be applicable to this product.

NCBI GI #	74275354
NCBI GeneID	2891

NCBI Accession #	NP_000817.2
UniProt Primary Accession #	P42262
UniProt Secondary Accession #	Q96FP6
UniProt Related Accession #	P42262
GenBank Nucleotide #	NM_000826.3
NCBI Official Full Name	glutamate receptor 2 isoform 1
NCBI Official Synonym Full Names	glutamate receptor, ionotropic, AMPA 2
NCBI Official Symbol	GRIA2
NCBI Official Synonym Symbols	GLUR2; GLURB; GluA2; HBGR2; GluR-K2
UniProt Protein Name	Glutamate receptor 2
UniProt Synonym Protein Names	AMPA-selective glutamate receptor 2; GluR-B; GluR-K2; Glutamate receptor ionotropic, AMPA 2
UniProt Gene Name	GRIA2
UniProt Synonym Gene Names	GLUR2; GluR-2; GluA2
UniProt Entry Name	GRIA2_HUMAN
NCBI Protein Information	glutamate receptor 2; gluR-2; gluR-B; AMPA-selective glutamate receptor 2
NCBI Summary for GluR2	Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. This gene product belongs to a family of glutamate receptors that are sensitive to alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA), and function as ligand-activated cation channels. These channels are assembled from 4 related subunits, GRIA1-4. The subunit encoded by this gene (GRIA2) is subject to RNA editing (CAG->CGG; Q->R) within the second transmembrane domain, which is thought to render the channel impermeable to Ca(2+). Human and animal studies suggest that pre-mRNA editing is essential for brain function, and defective GRIA2 RNA editing at the Q/R site may be relevant to amyotrophic lateral sclerosis (ALS) etiology. Alternative splicing, resulting in transcript variants encoding different isoforms, (including the flip and flop isoforms that vary in their signal transduction properties), has been noted for this gene. [provided by RefSeq, Jul 2008]
UniProt Comments for GluR2	GluR2: an integral membrane protein belonging to the glutamate-gated ion channel family. L-glutamate (Glu) acts as an excitatory neurotransmitter at many synapses in the central nervous system. Glutamate receptors are heteromeric protein complexes with multiple subunits, each possessing transmembrane regions, and all arranged to form a ligand-gated ion channel. The postsynaptic actions of Glu are mediated by a variety of receptors that are named according to their selective agonists. This receptor binds AMPA(quisqualate) > glutamate > kainate. Each of the four GluR proteins (GRIA1-4) include flip and flop isoforms generated by alternative RNA splicing. Protein type: Membrane protein, multi-pass; Channel, ligand-gated; Channel, calcium; Membrane protein, integral Chromosomal Location of Human Ortholog: 4q32.1 Cellular Component: postsynaptic membrane; synaptic vesicle; endoplasmic reticulum membrane; integral to plasma membrane; dendrite; plasma membrane; cell junction Molecular Function: protein binding; extracellular-glutamate-gated ion channel activity; ionotropic glutamate receptor activity; alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate selective glutamate receptor activity Biological Process: synaptic transmission; synaptic transmission, glutamatergic; ionotropic glutamate receptor signaling pathway; signal transduction
Research Articles on GluR2	**1.** ADAR2 expression level reflects editing activity at the GluA2 Q/R site; although the edited GluA2 pre-mRNA is readily spliced, the unedited GluA2 pre-mRNA is also spliced and transported to the cytoplasm when ADAR2 expression is low.

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