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Product datasheet for RC212599L4V

Ionotropic Glutamate receptor 2 (GRIA2) (NM_001083619) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Ionotropic Glutamate receptor 2 (GRIA2) (NM_001083619) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Ionotropic Glutamate receptor 2
Synonyms:	GluA2; gluR-2; gluR-B; GluR-K2; GLUR2; GLURB; HBGR2; NEDLIB
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001083619
ORF Size:	2649 bp
ORF Nucleotide Sequence:	`The ORF insert of this clone is exactly the same as(RC212599).`
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_001083619.1, NP_001077088.1
RefSeq Size:	5755 bp
RefSeq ORF:	2652 bp
Locus ID:	2891
UniProt ID:	P42262
Cytogenetics:	4q32.1
Protein Families:	Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

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Protein Pathways:	Amyotrophic lateral sclerosis (ALS), Long-term depression, Long-term potentiation, Neuroactive ligand-receptor interaction
MW:	98.9 kDa
Gene Summary:	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]