

Product datasheet for TA333123

OriGene Technologies, Inc.

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Ionotropic Glutamate receptor 2 (GRIA2) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WE

Reactivity: WB 1:500 - 1:2000

Human, Mouse, Rat

Modifications: Phospho-specific

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: A phospho specific peptide corresponding to residues surrounding S880 of human GRIA2

Formulation: Store at -20°C (regular) and -80°C (long term). Avoid freeze / thaw cycles. Buffer: PBS with

0.02% sodium azide, 50% glycerol, pH7.3.

Concentration: lot specific

Purification: Affinity purification

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 883

Gene Name: glutamate ionotropic receptor AMPA type subunit 2

Database Link: NP 001077089

Entrez Gene 14800 MouseEntrez Gene 29627 RatEntrez Gene 2891 Human

P42262





Background:

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.

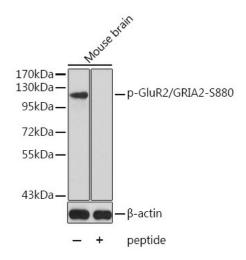
Synonyms: GluA2; GluR-K2; GLUR2; GLURB; HBGR2

Protein Families: Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

Protein Pathways: Amyotrophic lateral sclerosis (ALS), Long-term depression, Long-term potentiation,

Neuroactive ligand-receptor interaction

Product images:



Western blot analysis of extracts from mouse brain tissue using Phospho-GluR2/GRIA2-S880 antibody (TA333123) and the same antibody preincubated with blocking peptide. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% BSA.