ARG10605
anti-GluR2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GluR2
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GluR2
Species	Human
Immunogen	Recombinant protein around aa. 25-360 of Human GluR2
Conjugation	Un-conjugated
Alternate Names	AMPA-selective glutamate receptor 2; GluA2; GluR-K2; Glutamate receptor ionotropic, AMPA 2; GluR-2; HBGR2; GLUR2; GluR-B; Glutamate receptor 2; GLURB

Application Instructions

Application table

Application	Dilution
FACS	1-3µg/1x10^6
ICC/IF	2µg/ml
IHC-P	0.5-1µg/ml
WB	0.1-0.5µg/ml

Application Note: IHC-P: Antigen Retrieval: Boil tissue sections in 10 mM Citrate buffer (pH 6.0) for 20 min
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control	Rat brain, C6 and Mouse brain
Observed Size	~ 100 kDa

Properties

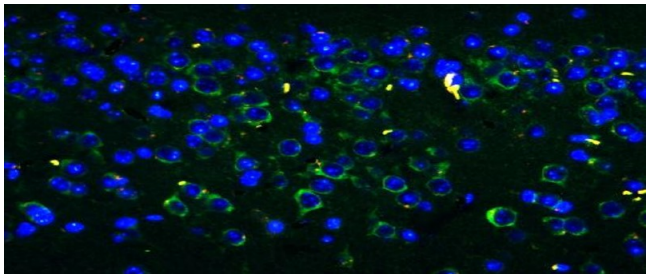
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.025% Sodium azide and 2.5% BSA.
Preservative	0.025% Sodium azide
Stabilizer	2.5% BSA

Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

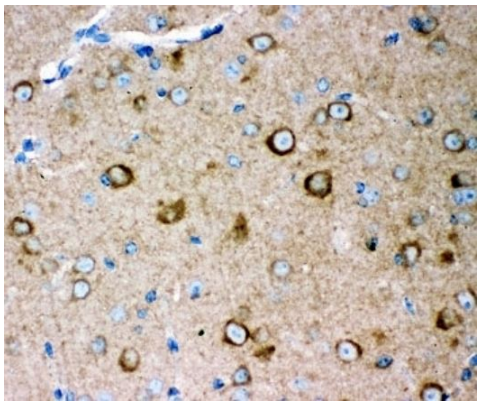
Gene Symbol	GRIA2
Gene Full Name	glutamate receptor, ionotropic, AMPA 2
Background	Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. This gene product belongs to a family of glutamate 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. [provided by RefSeq, Jul 2008]
Function	Receptor for glutamate that functions as ligand-gated ion channel in the central nervous system and plays an important role in excitatory synaptic transmission. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening of the cation channel, and thereby converts the chemical signal to an electrical impulse. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist. In the presence of CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of glutamate. [UniProt]
Highlight	Related products: GluR2 antibodies; Related news: Viral-like capsids, new trans-synaptic mRNA transport mechanism
Calculated Mw	99 kDa
PTM	Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-610 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-836 palmitoylation does not affect cell surface expression but regulates stimulation-dependent endocytosis (By similarity).

Images



ARG10605 anti-GluR2 antibody ICC/IF image

Immunofluorescence: Mouse brain tissues stained with ARG10605 anti-GluR2 antibody at 2µg/mL dilution.

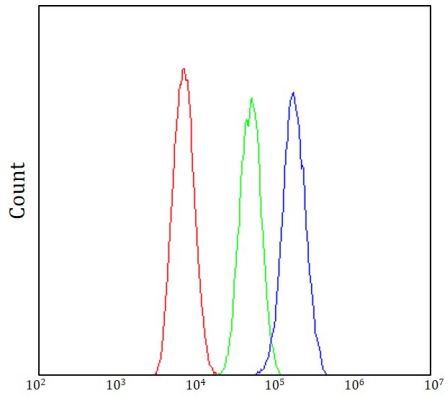


ARG10605 anti-GluR2 antibody IHC-P image

Immunohistochemistry: Mouse brain tissue stained with ARG10605 anti-GluR2 antibody at 1µg/mL dilution.

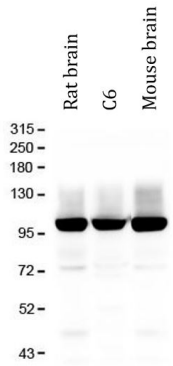
ARG10605 anti-GluR2 antibody WB image

Western blot: 1) Rat brain, and 2) Mouse brain lysate stained with ARG10605 anti-GluR2 antibody at 0.5µg/mL dilution.



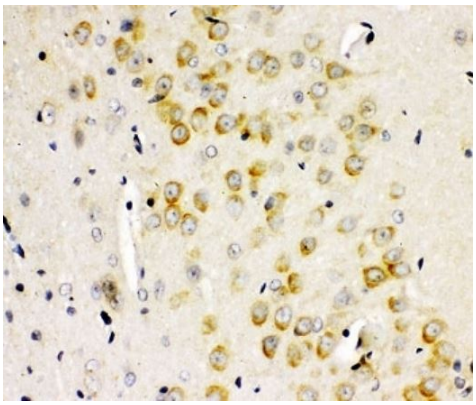
ARG10605 anti-GluR2 antibody FACS image

Flow Cytometry: U-87MG stained with ARG10605 anti-GluR2 antibody at 1µg/1x10^6 cells dilution.



ARG10605 anti-GluR2 antibody WB image

Western blot: Rat brain, C6 and Mouse brain lysates stained with ARG10605 anti-GluR2 antibody at 0.5µg/mL dilution.



ARG10605 anti-GluR2 antibody IHC-P image

Immunohistochemistry: Rat brain tissue stained with ARG10605 anti-GluR2 antibody at 1µg/mL dilution.