For Research Use Only

Glutamate receptor 2 Polyclonal antibody



Catalog Number: 11994-1-AP

31 Publications

Basic Information

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BC010574
GenelD (NCBI):

150ul , Concentration: 750 µg/ml by 2891
Nanodrop and 420 µg/ml by Bradford Full Name: method using BSA as the standard;

glutamate receptor, ionotropic, AMPA protein lysate

GenBank Accession Number:

Rabbit Calculated MW:
Isotype: 883 aa, 99 kDa
IgG Observed MW:
Immunogen Catalog Number: 94-105 kDa

AG2662

Size:

Purification Method: Antigen affinity purification Recommended Dilutions:

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF 1:50-1:500

WB 1:500-1:2000

Applications

Tested Applications:

FC (Intra), IF, IHC, IP, WB, ELISA

Cited Applications: CoIP, IF, IHC, IP, WB Species Specificity: human, mouse, rat Cited Species:

human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: mouse brain tissue,
IP: mouse brain tissue,
IHC: mouse brain tissue,
IF: mouse eye tissue,

Background Information

Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. GRIA2 (glutamate receptor 2, GluR-2) 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 that mediate the fast component of excitatory postsynaptic currents in neurons of the central nervous system. These channels are assembled from 4 related subunits, GRIA1-4. The presence of GRIA2 in the heteromeric AMPA receptors impermeabilizes it to calcium, preventing possible calcium-mediated toxicity.

Notable Publications

Author	Pubmed ID	Journal	Application
Pengcheng Ma	36179027	Sci Adv	WB,CoIP
YuanYuan Hou	34710402	Exp Neurol	WB
Joanna Gruszczynska-Biegala	27826230	Front Cell Neurosci	WB

Storage

Storage

Store at -20°C. Stable for one year after shipment.

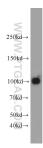
Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

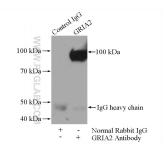
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

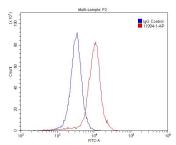
Selected Validation Data



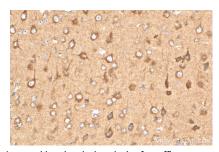
mouse brain tissue were subjected to SDS PAGE followed by western blot with 11994-1-AP (Glutamate receptor 2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



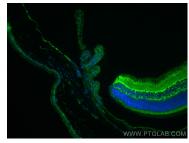
IP Result of anti-Glutamate receptor 2 (IP:11994-1-AP, 4ug; Detection:11994-1-AP 1:500) with mouse brain tissue lysate 4000ug.



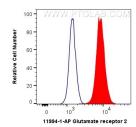
1X10^6 SH-SY5Y cells were stained with 0.2ug Glutamate receptor 2 antibody (11994-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 11994-1-AP (Glutamate receptor 2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse eye tissue using Glutamate receptor 2 antibody (11994-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).



1X10^6 SH-SY5Y cells were intracellularly stained with 0.4 ug Anti-Human Glutamate receptor 2 (11994-1-AP) and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).