For Research Use Only

NMDAR2A/GRIN2A Recombinant antibody

Catalog Number:83465-2-RR



Purification Method:

Protein A purification

CloneNo.:

Basic Information

Catalog Number: GenBank Accession Number:

83465-2-RR NM 000833 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 2903 240445D4 Nanodrop: **UNIPROT ID:** Recommended Dilutions: Q12879 WB 1:5000-1:50000 Rabbit IF-P 1:200-1:800 Full Name:

Isotype: glutamate receptor, ionotropic, N-

methyl D-aspartate 2A IgG

Immunogen Catalog Number: Calculated MW: AG29101 165 kDa Observed MW: 160-180 kDa

Applications

Tested Applications: WB, IF-P, FC (Intra), ELISA

Species Specificity: human, mouse, rat

Positive Controls:

WB: mouse brain tissue, rat brain tissue

IF-P: rat brain tissue,

Background Information

GRIN2A (glutamate ionotropic receptor NMDA type subunit 2A), also known as NMDAR2A. And its molecular weight $is\ 165\ kDa.\ GRIN2A\ is\ located\ in\ cell\ projection,\ dendritic\ spine,\ cell\ membrane,\ synapse,\ postsynaptic\ cell$ membrae, cytolamic vesicle membrane, which is expressed in many tissues, highest expression in brain and heart. This gene encodes a member of the glutamate-gated ion channel protein family. The encoded protein is an Nmethyl-D-aspartate (NMDA) receptor subunit. NMDA receptors are both ligand-gated and voltage-dependent, and are involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. These receptors are permeable to calcium ions, and activation results in a calcium influx into post-synaptic cells, which results in the activation of several signaling cascades. Disruption of this gene is associated with focal epilepsy and speech disorder with or without cognitive disability. Alternative splicing results in multiple transcript variants.

Storage

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

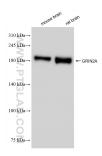
Storage Buffer:

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

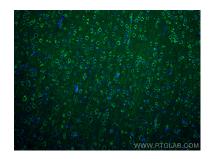
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

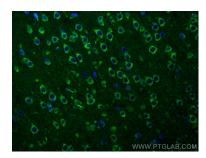
Selected Validation Data



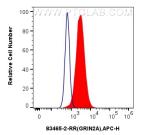
Various lysates were subjected to SDS PAGE followed by western blot with 83465-2-RR (GRIN2A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



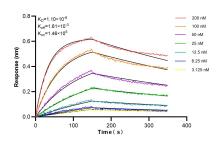
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat brain tissue using MMDAR2A/GRIN2A antibody (83465-2-RR, Clone: 240445D4) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat brain tissue using MMDAR2A/GRIN2A antibody (83465-2-RR, Clone: 240445D4) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 U-251 cells were intracellularly stained with 0.25 ug Grinza Recombinant Antibody (83465-2-RR, Clone:240445D4) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83465-2-RR against Human NMDAR2A/GRIN2A were performed. The affinity constant is 11.0 nM.