For Research Use Only

NMDAR2A/GRIN2A Recombinant antibody, PBS Only (Detector)

Catalog Number:83465-2-PBS

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Basic Information

Catalog Number:
83465-2-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG29101

GenBank Accession Number:
NM_000833

GeneID (NCBI):
2903

UNIPROT ID:
Q12879

Full Name:
glutamate receptor, ionotropic, N-methyl D-aspartate 2A

Calculated MW:
165 kDa

Observed MW:
160-180 kDa

Purification Method:
Protein A purification

CloneNo.:
240445D4

Applications

Tested Applications:
WB, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat

Product Information

83465-2-PBS targets NMDAR2A/GRIN2A as part of a matched antibody pair:

MP00461-2: 83465-4-PBS capture and 83465-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.

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 N-methyl-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.

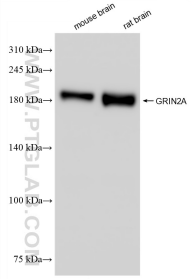
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

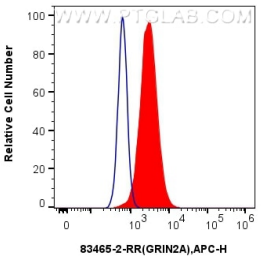
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

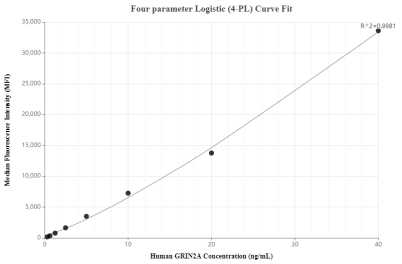
Selected Validation Data



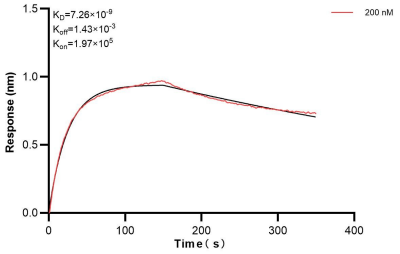
Various lysates were subjected to SDS PAGE followed by western blot with 83465-2-RR (GRIN2A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83465-2-PBS in a different storage buffer formulation.



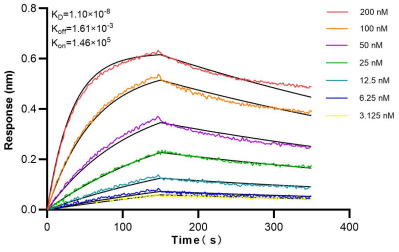
1x10^6 U-251 cells were intracellularly stained with 0.25 ug Grin2a Recombinant Antibody (83465-2-RR, Clone:240445D4) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83465-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00461-2, GRIN2A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83465-4-PBS. Detection antibody: 83465-2-PBS. Standard: Ag29101. Range: 0.313-40 ng/mL.



Biolayer interferometry (BLI) kinetic assay of 83465-2-PBS against Human NMDAR2A/GRIN2A was performed. The affinity constant is 7.26 nM.



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