For Research Use Only

GLAST/EAAT1 Recombinant antibody

Catalog Number:84497-4-RR

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Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
84497-4-RR

Size:
1000 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG16962

GenBank Accession Number:
BC037310

GeneID (NCBI):
6507

UNIPROT ID:
P43003

Full Name:
solute carrier family 1 (glial high affinity glutamate transporter), member 3

Calculated MW:
542 aa, 60 kDa

Purification Method:
Protein A purfication

CloneNo.:
241907H3

Recommended Dilutions:
IF/ICC 1:125-1:500

Applications

Tested Applications:
IF/ICC, FC (Intra), ELISA

Species Specificity:
human, mouse

Positive Controls:

IF/ICC : Neuro-2a cells,

Background Information

SLC1A3, also known as EAAT-1 or GLAST, is a membrane-bound protein localized in glial cells and pre-synaptic glutamatergic nerve endings. It transports the excitatory neurotransmitters L-glutamate and D-aspartate, which is essential for terminating the postsynaptic acction of glutamate. Recently, a correlation between expression/function of glial EAAT-1 and tumor proliferation has been reported. The exceptionally rare expression of EAAT-1 in non-neoplastic choroid plexus (CP) compared to choroid plexus tumors (CPT) may distinguishes neoplastic from normal CP. There are a number of splicing variants of SLC1A3, like GLAST1a and GLAST1b, exist due to the exon skipping. It also undergo glycosylation. Variety of bands can be observed in the western blotting assay: 50-55 kDa represents the unglycosylated GLAST1a or GLAST1b, 65-70 kDa correspond to the glycosylated proteins, larger proteins between 90-130 kDa may be the multimers of SLC1A3. (11086157, 17471058, 12546822)

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

For technical support and original validation data for this product please contact:
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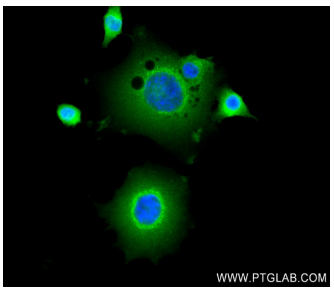
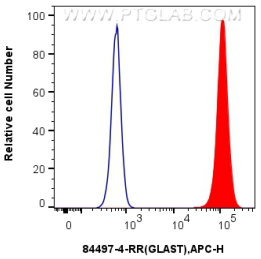
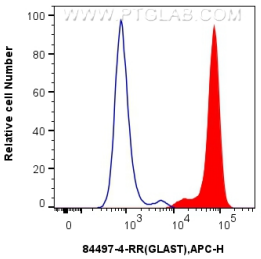
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed Neuro-2a cells using GLAST antibody (84497-4-RR, Clone: 241907H3) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10^6 HEK-293 cells were intracellularly stained with 0.25 ug GLAST Recombinant antibody (84497-4-RR, Clone:241907H3) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10^6 U-937 cells were intracellularly stained with 0.25 ug GLAST Recombinant antibody (84497-4-RR, Clone:241907H3) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).