For Research Use Only

CoraLite® Plus 488-conjugated GLAST/EAAT1 Polyclonal antibody

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Antibodies | ELISA kits | Proteins
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Catalog Number:CL488-20785 Featured Product

Basic Information

Catalog Number: CL488-20785 Concentration: 1000 ug/ml Source:

Isotype:

Immunogen Catalog Number:

AG14177

Rabbit

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 Observed MW: 50-55 kDa, 90-100 kDa Purification Method:

Antigen Affinity Purified Recommended Dilutions: IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications: IF/ICC, FC (Intra) Species Specificity: human, mouse, rat Positive Controls:

IF/ICC : Neuro-2a cells,
FC (Intra) : 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

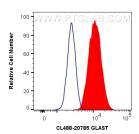
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Buffer.

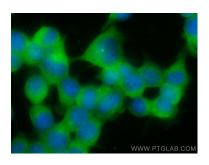
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 Neuro-2a cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human GLAST (CL488-20785) (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (-20°C Ethanol) fixed Neuro-2a cells using Coralite® Plus 488 GLAST antibody (CL488-20785) at dilution of 1:200.