For Research Use Only

## CoraLite® Plus 488-conjugated GLAST/EAAT1 Polyclonal antibody

www.ptglab.com

Featured Product Catalog Number: CL488-20785

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL488-20785 GeneID (NCBI): Size:

100ul, Concentration: 1000 ug/ml by 6507

Nanodrop; **UNIPROT ID:** Source P43003

Rabbit **Full Name:** 

solute carrier family 1 (glial high Isotype IgG affinity glutamate transporter),

member 3 Immunogen Catalog Number: AG14177

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

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,

## **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)

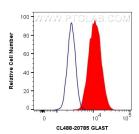
Storage

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

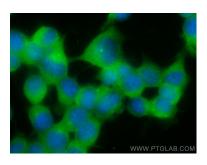
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

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.