For Research Use Only

Biotin-conjugated GLAST/EAAT1 Polyclonal antibody

Catalog Number:Biotin-20785 Featured Product



Basic Information

Catalog Number: GenBank Accession Number:

Biotin-20785 BC037310
Size: GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 6507 Nanodrop:

Nanodrop; UNIPROT ID:
Source: P43003
Rabbit Full Name:

 Isotype:
 solute carrier family 1 (glial high

 IgG
 affinity glutamate transporter),

Immunogen Catalog Number: member 3

AG14177 Calculated MW:

542 aa, 60 kDa Observed MW: 50-55 kDa, 90-100 kDa Purification Method: Antigen affinity purification Recommended Dilutions:

IHC 1:50-1:500

Applications

Tested Applications:

IHC

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 **Positive Controls:**

IHC : mouse brain tissue,

Background Information

SLC 1A3, 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.

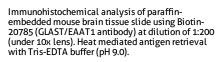
Storage Buffer

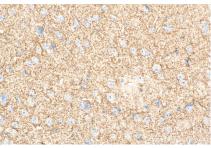
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data







Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using Biotin-20785 (GLAST/EAAT1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).