For Research Use Only

Biotin-conjugated GLAST/EAAT1 Polyclonal antibody

Catalog Number:Biotin-20785 Featured Product



Purification Method:

IHC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

Basic Information

Catalog Number:
Biotin-20785
BC037310
Concentration:
GeneID (NCBI):
1000 ug/ml
6507
Source:
UNIPROT ID:
Rabbit
P43003
Isotype:
GenBank Accession Number:
BC037310
UNCBI):
GeneID (NCBI):
FULL Name:

IgG solute carrier family 1 (glial high affinity glutamate transporter), member 3

AG14177 member 3

Calculated MW:
542 aa, 60 kDa

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

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.

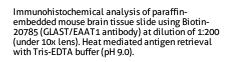
torage Buffer:

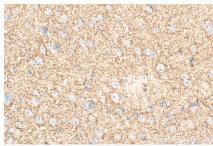
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

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).