

Anti-SLC1A4 Antibody
Catalog # ABO11496**Specification**

Anti-SLC1A4 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P43007
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Neutral amino acid transporter A(SLC1A4) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SLC1A4 Antibody - Additional Information

Gene ID 6509

Other Names

Neutral amino acid transporter A, Alanine/serine/cysteine/threonine transporter 1, ASCT-1, SATT, Solute carrier family 1 member 4, SLC1A4, ASCT1, SATT

Calculated MW

55723 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Membrane ; Multi-pass membrane protein . Melanosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Tissue Specificity

Expressed mostly in brain, muscle, and pancreas but detected in all tissues examined.

Protein Name

Neutral amino acid transporter A

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human SLC1A4(495-512aa EAIPNCKSEEETSPVTH), different from the related rat and mouse sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-SLC1A4 Antibody - Protein Information

Name SLC1A4 {ECO:0000303|PubMed:7896285, ECO:0000312|HGNC:HGNC:10942}

Function

Sodium-dependent neutral amino-acid transporter that mediates transport of alanine, serine, cysteine, proline, hydroxyproline and threonine.

Cellular Location

Membrane; Multi-pass membrane protein. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

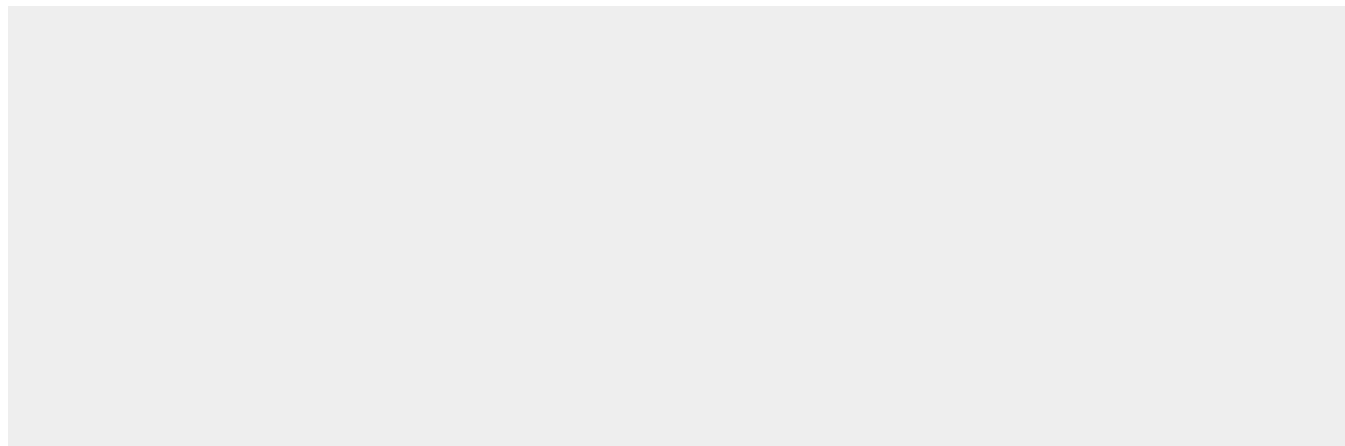
Tissue Location

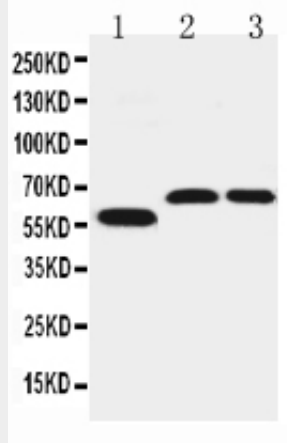
Expressed mostly in brain, muscle, and pancreas but detected in all tissues examined.

Anti-SLC1A4 Antibody - Protocols

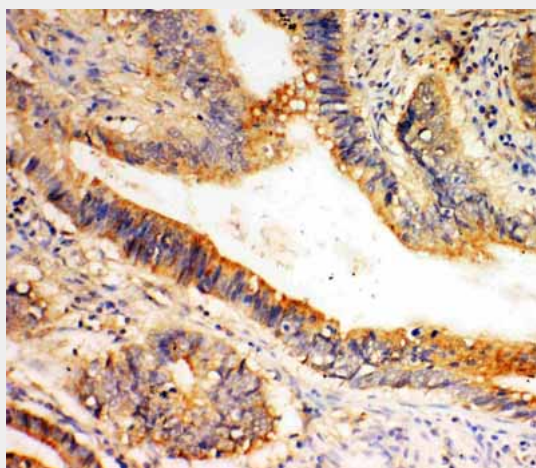
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-SLC1A4 Antibody - Images



Anti-SLC1A4 antibody, ABO11496, Western blotting
Lane 1: U87 Cell Lysate
Lane 2: Rat Brain Tissue Lysate
Lane 3: Mouse Brain Tissue Lysate



Anti-SLC1A4 antibody, ABO11496, IHC(P)
IHC(P): Human Intestinal Cancer Tissue

Anti-SLC1A4 Antibody - Background

Neutral amino acid transporter A, also called SLC1A4 or ASCT1, is a protein that in humans is encoded by the SLC1A4 gene. The SLC1A4 gene is mapped to chromosome 2p14 based on an alignment of the SLC1A4 sequence with the genomic sequence (GRCh37). ASCT1 does not transport glutamate or aspartate but alanine, serine, cysteine, and threonine instead. It is found that the ASCT1 transporter functions primarily as an amino acid exchanger. Transport is associated with a chloride channel activity that is thermodynamically uncoupled from amino acid transport. This gene also exhibits sodium dependence.