

Anti-SLC1A4 Antibody

Catalog # ABO11496

Specification

Anti-SLC1A4 Antibody - Product Information

ApplicationWB, IHCPrimary AccessionP43007HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Neutral amino acid transporter A(SLC1A4) detection. Testedwith 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
blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
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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 EAIPNCKSEEETSPLVTH), 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 r°Constitution, 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.

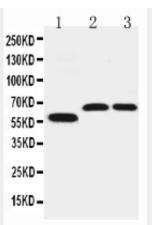
Anti-SLC1A4 Antibody - Protocols

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

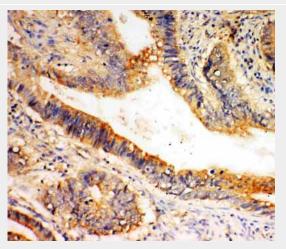
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-SLC1A4 Antibody - Images





Anti-SLC1A4 antibody, ABO11496, Western blottingLane 1: U87 Cell LysateLane 2: Rat Brain Tissue LysateLane 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 encodes 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 animo acid transport. This gene also exhibits sodium dependence.