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SLC1A4 Rabbit pAb

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Catalog # AP57668

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P43007
Predicted	Rat, Human, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55723
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SLC1A4
Epitope Specificity	121-220/532
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Links between Gene and PubMed are the result of the following: 1. Manual curation within NCBI. Part of the process of generating a REVIEWED RefSeq is an analysis of the current literature. Papers that are seminal in defining the gene, its sequence, and its function are added to the record at that time. Alert users point out gaps or errors in papers associated with a Gene record. These messages are reviewed and implemented as required. 2. Integration of information from other public databases. Gene integrates gene-citation from resources external to NCBI such as model organism-specific databases, Gene Ontology (GO), groups curating interactions, and sequence databases. The assumption in using these source is that they report citations specific to a gene in a known species. Gene does not process citations from OMIM automatically, because many of citations in OMIM refer to studies of genes in species other than human.

Additional Information

Gene ID	6509
Other Names	Neutral amino acid transporter A, Alanine/serine/cysteine/threonine transporter 1, ASCT-1, Solute carrier family 1 member 4, SLC1A4 {ECO:0000303|PubMed:7896285, ECO:0000312|HGNC:HGNC:10942}
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SLC1A4 {ECO:0000303|PubMed:7896285, ECO:0000312|HGNC:HGNC:10942}
Function	Sodium-coupled antiporter of neutral amino acids. In a tri- substrate transport cycle, exchanges neutral amino acids between the extracellular and intracellular compartments, coupled to the inward cotransport of at least one sodium ion (PubMed:24808181, PubMed:27272177, PubMed:34630942, PubMed:8910405). Exchanges neutral amino acids such as L- and D-serine, L-threonine, L-asparagine and L- alanine in a bidirectional way (PubMed:14502423, PubMed:26041762, PubMed:27272177, PubMed:34630942, PubMed:8101838, PubMed:8340364, PubMed:8910405). Involved in homeostasis of D-serine, a coagonist of synaptic NMDA receptors. In astrocytes at excitatory synapses, mediates electrogenic D-serine influx coupled to L-serine efflux and L-serine shuttling to neurons for de novo D-serine synthesis (By similarity). Displays sodium- and amino acid-dependent but uncoupled channel-like anion conductance with a preference SCN(-) > NO3(-) > I(-) > Cl(-) (PubMed:8910405).
Cellular Location	Cell membrane; Multi-pass membrane protein. Melanosome membrane; Multi-pass membrane protein. 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.

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.