

**SLC1A5 Rabbit pAb**  
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**Catalog # AP94125****Specification**

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**SLC1A5 Rabbit pAb - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P51912</a>
Reactivity	<b>Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>58483</b>

**SLC1A5 Rabbit pAb - Additional Information****Other Names**

Neutral amino acid transporter B(0), ATB(0), ASC-like Na(+)-dependent neutral amino acid transporter ASCT2, Insulin-activated amino acid transporter, Sodium-dependent neutral amino acid transporter type 2, Solute carrier family 1 member 5, Slc1a5, Aaat, Asct2, Slc1a7

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**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.

**SLC1A5 Rabbit pAb - Protein Information**

**Name** Slc1a5

**Synonyms** Aaat, Asct2, Slc1a7

**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 (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/7702599" target="\_blank">7702599</a>, PubMed:<a href="http://www.uniprot.org/citations/8662767" target="\_blank">8662767</a>). The preferred substrate is the essential amino acid L- glutamine, a precursor for biosynthesis of proteins, nucleotides and amine sugars as well as an alternative fuel for mitochondrial oxidative phosphorylation. Exchanges L-glutamine with other neutral amino acids such as L-serine, L-threonine and L-asparagine in a bidirectional way. Provides L-glutamine to proliferating stem and activated cells driving the metabolic switch toward cell differentiation (By similarity). The transport cycle is usually pH-independent, with the exception of L- glutamate. Transports extracellular L-glutamate coupled to the cotransport of one proton and one sodium ion in exchange for intracellular L-glutamine counter-ion. May provide for L-glutamate uptake in glial cells regulating glutamine/glutamate cycle in the nervous system (By similarity). Can transport D-amino acids.

Mediates D-serine release from the retinal glia potentially affecting NMDA receptor function in retinal neurons (By similarity). Displays sodium- and amino acid-dependent but uncoupled channel-like anion conductance with a preference  $\text{SCN}(-) \gg \text{NO}_3(-) > \text{I}(-) > \text{Cl}(-)$  (By similarity). Through binding of the fusogenic protein syncytin-1/ERVW-1 may mediate trophoblasts syncytialization, the spontaneous fusion of their plasma membranes, an essential process in placental development (By similarity).

#### Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q15758}. Melanosome {ECO:0000250|UniProtKB:Q15758}

#### Tissue Location

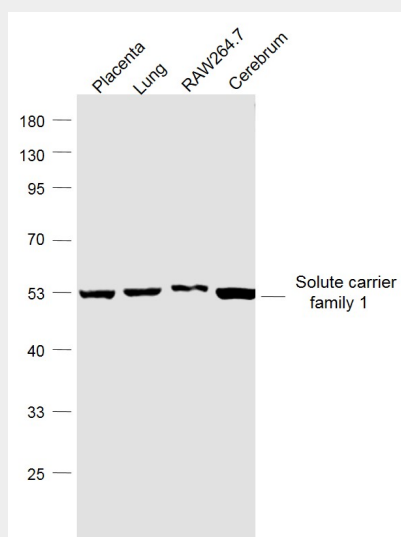
Highly expressed in adipose tissue. Detected in lung, skeletal muscle, large intestine, kidney and testis (PubMed:7702599, PubMed:8662767). Expressed in lung, brain, kidney and neural retina (at protein level). Expressed in Mueller cells (at protein level) (PubMed:17094966).

### SLC1A5 Rabbit pAb - Protocols

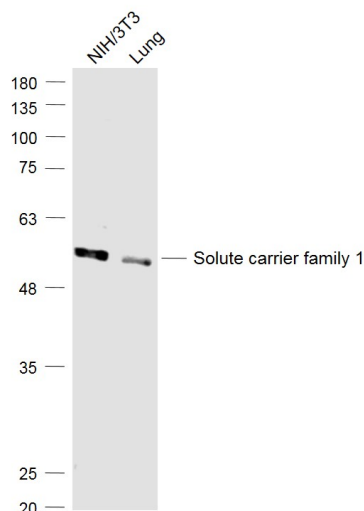
Provided below are standard protocols that you may find useful for product applications.

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

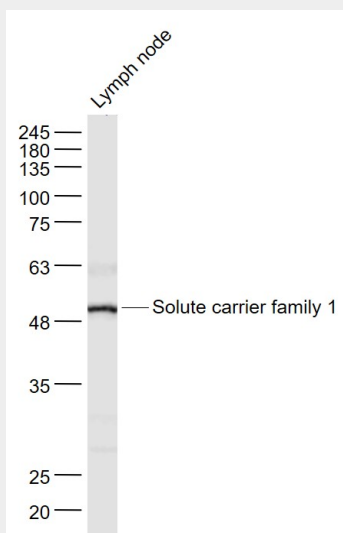
### SLC1A5 Rabbit pAb - Images



Sample: RAW264.7 (Mouse) Cell Lysate at 30 ug Placenta (Mouse) Lysate at 40 ug Lung (Mouse) Lysate at 40 ug Cerebrum (Mouse) Lysate at 40 ug Primary: Anti-Solute carrier family 1 (AP94125) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 56 kD Observed band size: 56 kD



Sample: NIH/3T3(Mouse) Cell Lysate at 30 ug Lung (Mouse) Lysate at 40 ug Primary: Anti-Solute carrier family 1 (AP94125) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 56 kD Observed band size: 56 kD



Sample: Lymph node (Mouse) Lysate at 40 ug Primary: Anti- Solute carrier family 1 (AP94125) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 56 kD Observed band size: 53 kD

### SLC1A5 Rabbit pAb - Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.