



## Rabbit Anti-SLC38A2 antibody

SL12125R

<b>Product Name:</b>	SLC38A2
<b>Chinese Name:</b>	氨基酸Transporter2抗体
<b>Alias:</b>	Amino acid transporter 2; Amino acid transporter A2; ATA2; SNAT2; KIAA1382; PRO1068; Protein 40-9-1; S38A2_HUMAN; SAT2; Slc38a2; Sodium-coupled neutral amino acid transporter 2; Solute carrier family 38 member 2; System A amino acid transporter; System A amino acid transporter 2; System A transporter 1; System N amino acid transporter 2.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	56kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human SLC38A2/SNAT2:21-150/506
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	The sodium-coupled neutral amino acid transporters (SNAT) of the SLC38 gene family include System A subtypes SNAT1, SNAT2 and SNAT4 and System N subtypes SNAT3 and SNAT5. The SLC38 transporters are essential for the uptake of nutrients,

energy production, metabolism, detoxification, and the cycling of neurotransmitters. SNAT2, also designated ATA2, PRO1068 and SAT2 is encoded by the human gene SLC38A2. The functional role of SNAT2 in the nervous system is unclear. Protein expression is notably enriched in the spinal cord and brain stem nuclei of the auditory system. System A transport proteins are also present in placental tissue. These SNAT proteins may play a significant role in fetal development and inhibition of the transport system has been associated with fetal growth retardation.

**Function:**

Functions as a sodium-dependent amino acid transporter. Mediates the saturable, pH-sensitive and electrogenic cotransport of neutral amino acids and sodium ions with a stoichiometry of 1:1. May function in the transport of amino acids at the blood-brain barrier and in the supply of maternal nutrients to the fetus through the placenta.

**Subcellular Location:**

Cell membrane. Insulin promotes recruitment to the plasma membrane from a pool localized in the trans-Golgi network or endosomes. Enriched in the somatodendritic compartment of neurons, it is also detected at the axonal shaft but excluded from the nerve terminal.

**Tissue Specificity:**

Ubiquitously expressed. Widely expressed in the central nervous system with higher concentrations in caudal regions. Expressed by glutamatergic and GABAergic neurons together with astrocytes and other non-neuronal cells in the cerebral cortex (at protein level).

**Post-translational modifications:**

Polyubiquitination by NEDD4L regulates the degradation and the activity of SLC38A2.

**Similarity:**

Belongs to the amino acid/polyamine transporter 2 family.

**SWISS:**

Q96QD8

**Gene ID:**

112483

**Database links:**

[Entrez Gene: 338044](#)Cow

[Entrez Gene: 54407](#)Human

[Entrez Gene: 67760](#)Mouse

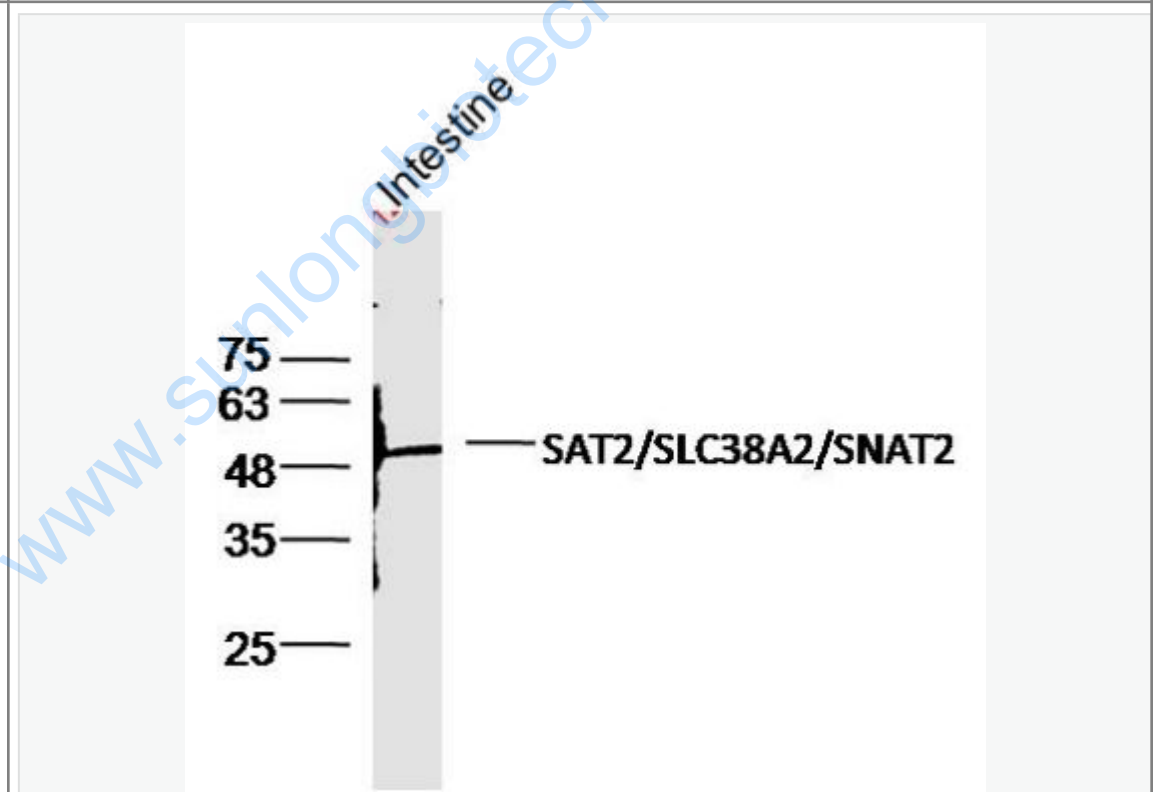
[Entrez Gene: 29642](#)Rat

[Oimim: 605180](#)Human  
[SwissProt: Q96QD8](#)Human  
[SwissProt: Q8CFE6](#)Mouse  
[SwissProt: Q9JHE5](#)Rat  
[Unigene: 221847](#)Human  
[Unigene: 46754](#)Mouse  
[Unigene: 16393](#)Rat

**Important Note:**

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

Picture:



Sample:

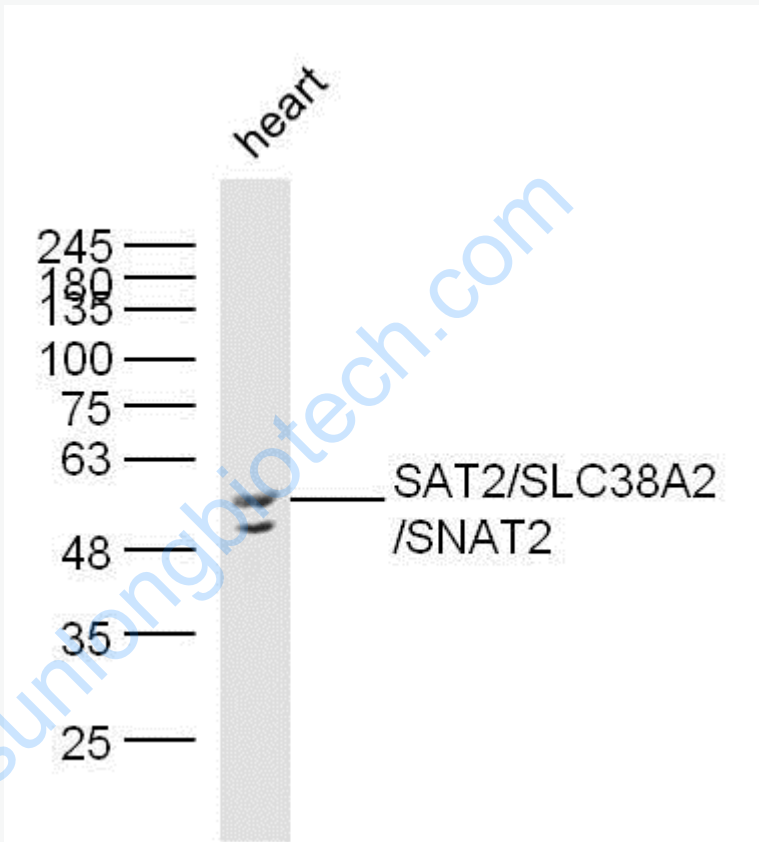
Intestine (Mouse) Lysate at 40 ug

Primary: Anti-SLC38A2 (SL12125R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56 kD



Sample:

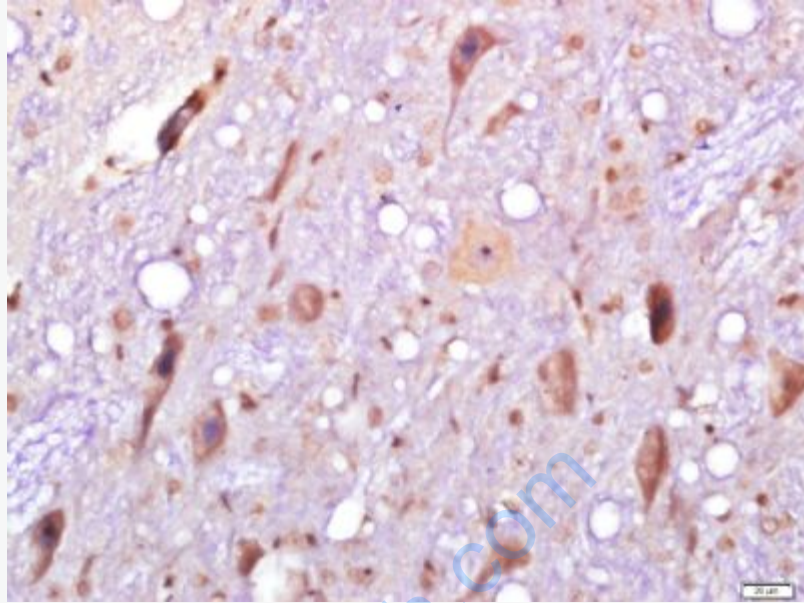
Heart (Mouse) Lysate at 40 ug

Primary: Anti-SLC38A2 (SL12125R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SLC38A2) Polyclonal Antibody, Unconjugated (SL12125R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.