



Rabbit Anti-SLC38A1 antibody

SL19825R

Product Name:	SLC38A1
Chinese Name:	溶质载体家族蛋白38成员1抗体
Alias:	Amino acid transporter A1; Amino acid transporter system A1; ATA 1; ATA1; N-system amino acid transporter 2; NAT 2; NAT2; S38A1_HUMAN; SAT 1; SAT1; SLC38A1; SNAT 1; SNAT1; Sodium-coupled neutral amino acid transporter 1; Solute carrier family 38 member 1; System A amino acid transporter 1; System N amino acid transporter 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Guinea Pig,Cat,
Applications:	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.
Molecular weight:	54kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SLC38A1:211-300/487
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	Amino acid transporters play essential roles in the uptake of nutrients, production of energy, chemical metabolism, detoxification, and neurotransmitter cycling. SLC38A1 is an important transporter of glutamine, an intermediate in the detoxification of ammonia

and the production of urea. Glutamine serves as a precursor for the synaptic transmitter, glutamate (Gu et al., 2001 [PubMed 11325958]).[supplied by OMIM, Mar 2008]

Function:

Functions as a sodium-dependent amino acid transporter. Mediates the saturable, pH-sensitive and electrogenic cotransport of glutamine and sodium ions with a stoichiometry of 1:1. May also transport small zwitterionic and aliphatic amino acids with a lower affinity. May supply glutamatergic and GABAergic neurons with glutamine which is required for the synthesis of the neurotransmitters glutamate and GABA.

Subcellular Location:

Cell membrane. Restricted to the somatodendritic compartment of neurons. Found in the cellular processes of neurons in the developing brain.

Tissue Specificity:

Expressed in the cerebral cortex by pyramidal and GABAergic neurons, astrocytes and other non-neuronal cells (at protein level). Expressed in placenta, heart, lung, skeletal muscle, spleen, stomach and testis.

Similarity:

Belongs to the amino acid/polyamine transporter 2 family.

SWISS:

Q9H2H9

Gene ID:

81539

Database links:

[Entrez Gene: 100725601](#) Guinea pig

[Entrez Gene: 81539](#) Human

[Entrez Gene: 105727](#) Mouse

[Entrez Gene: 170567](#) Rat

[Omim: 608490](#) Human

[SwissProt: Q9H2H9](#) Human

[SwissProt: Q8K2P7](#) Mouse

[SwissProt: Q9JM15](#) Rat

[Unigene: 533770](#) Human

[Unigene: 103568](#) Mouse

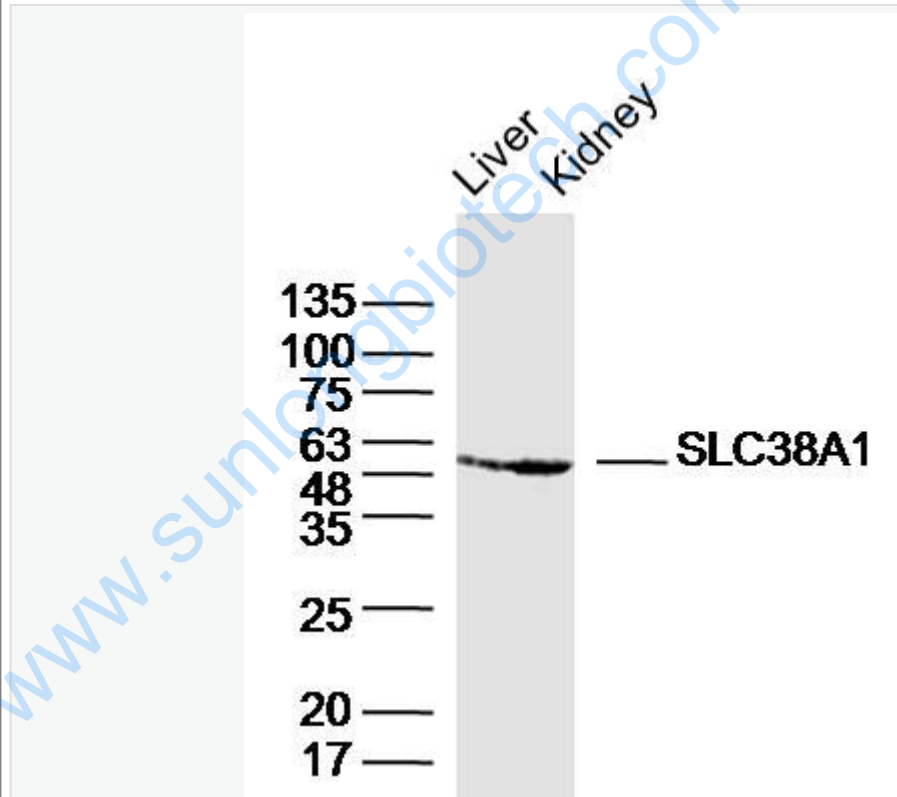
[Unigene: 162022](#) Rat

[Unigene: 96943](#) Rat

Important Note:

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

Picture:



Sample:

Liver (Mouse) Lysate at 40 ug

Kidney (Mouse) Lysate at 40 ug

Primary: Anti- SLC38A1 (SL19825R) at 1/300 dilution

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

	<p>Predicted band size: 54kD</p>
--	----------------------------------

	<p>Observed band size: 54kD</p>
--	---------------------------------

www.sunlongbiotech.com