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Rabbit Anti-Slc22a5 antibody

SL8149R

Product Name:	Slc22a5
Chinese Name:	溶质载体家族蛋白22成员5抗体
Alias:	High-affinity sodium-dependent carnitine cotransporter; OCTN2; Organic cation/carnitine transporter 2; S22A5_HUMAN; Slc22a5; Solute carrier family 22 member 5.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	58kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Slc22a5:101-210/557<Extracellular>
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:	Polyspecific organic cation transporters in the liver, kidney, intestine, and other organs are critical for elimination of many endogenous small organic cations as well as a wide array of drugs and environmental toxins. The encoded protein is a plasma integral membrane protein which functions both as an organic cation transporter and as a

sodium-dependent high affinity carnitine transporter. The encoded protein is involved in the active cellular uptake of carnitine. Mutations in this gene are the cause of systemic primary carnitine deficiency (CDSP), an autosomal recessive disorder manifested early in life by hypoketotic hypoglycemia and acute metabolic decompensation, and later in life by skeletal myopathy or cardiomyopathy. [provided by RefSeq, Jul 2008].

Function:
Sodium-ion dependent, high affinity carnitine transporter. Involved in the active cellular uptake of carnitine. Transports one sodium ion with one molecule of carnitine. Also transports organic cations such as tetraethylammonium (TEA) without the involvement of sodium. Also relative uptake activity ratio of carnitine to TEA is 11.3.

Subunit:
Interacts with PDZK1.

Subcellular Location:
Membrane; Multi-pass membrane protein.

Tissue Specificity:
Strongly expressed in kidney, skeletal muscle, heart and placenta. Highly expressed in intestinal cell types affected by Crohn disease, including epithelial cells. Expressed in CD68 macrophage and CD43 T-cells but not in CD20 B-cells.

DISEASE:
Defects in SLC22A5 are the cause of systemic primary carnitine deficiency (CDSP) [MIM:212140]. CDSP is an autosomal recessive disorder of fatty acid oxidation caused by defective carnitine transport. Present early in life with hypoketotic hypoglycemia and acute metabolic decompensation, or later in life with skeletal myopathy or cardiomyopathy.

Similarity:
Belongs to the major facilitator (TC 2.A.1)

SWISS:
O76082

Gene ID:
6584

Database links:

Entrez Gene: 6584 Human

Entrez Gene: 29726 Rat

Omim: 603377 Human

	SwissProt: O76082 Human SwissProt: O70594 Rat Unigene: 443572 Human Unigene: 8844 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.