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Anti-Solute Carrier Family 22 Member 5 Antibody

Catalog # ABO11484

Specification

Anti-Solute Carrier Family 22 Member 5 Antibody - Product Information

Application	**WB**
Primary Accession	Q9Z0E8
Host	**Rabbit**
Reactivity	**Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Solute carrier family 22 member 5(SLC22A5) detection. Tested with WB in Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Solute Carrier Family 22 Member 5 Antibody - Additional Information

Gene ID 20520

Other Names
Solute carrier family 22 member 5, High-affinity sodium-dependent carnitine cotransporter, Organic cation/carnitine transporter 2, Slc22a5, Octn2

Calculated MW
62780 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Mouse, Rat

Subcellular Localization
Apical cell membrane ; Multi-pass membrane protein . Colocalizes with PDZK1 on apical membranes of kidney proximal tubules.

Tissue Specificity
Widely expressed. Expressed in kidney, liver and testis. .

Protein Name
Solute carrier family 22 member 5

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of mouse Solute carrier family 22 member 5(531-547aa KQWQIQSQTRMQKDGEE), different from the related rat sequence by two amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-Solute Carrier Family 22 Member 5 Antibody - Protein Information

Name Slc22a5 {ECO:0000312|MGI:MGI:1329012}

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 (PubMed:10454528, PubMed:20722056). 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 (PubMed:10454528). May also contribute to regulate the transport of organic compounds in testis across the blood-testis-barrier (By similarity).

Cellular Location
Apical cell membrane; Multi-pass membrane protein. Basal cell membrane {ECO:0000250|UniProtKB:O76082}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:O76082}; Multi-pass membrane protein {ECO:0000250|UniProtKB:O76082}. Note=Colocalizes with PDZK1 on apical membranes of kidney proximal tubules (PubMed:15523054) In intestinal cells, apical expression is induced by TNF (PubMed:20722056).

Tissue Location
Widely expressed. Expressed in kidney, liver and testis (PubMed:11010964). Expressed at the brush border of the small, large intestine and colon (at protein level) (PubMed:11010964, PubMed:20722056).

Anti-Solute Carrier Family 22 Member 5 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Solute Carrier Family 22 Member 5 Antibody - Images

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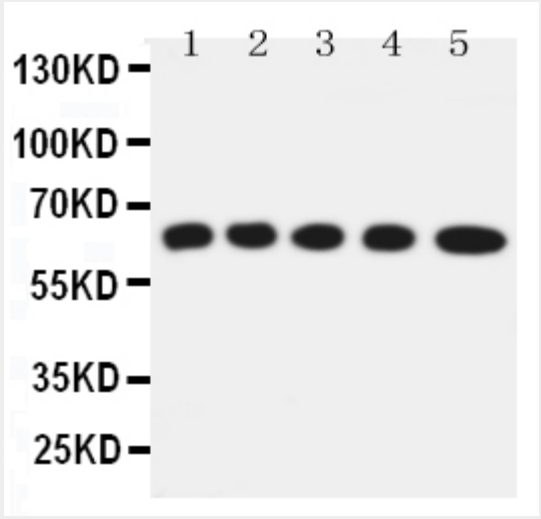

Anti-Solute carrier family 22 member 5 antibody, ABO11484, Western blottingLane 1: Rat Kidney Tissue LysateLane 2: Rat Skeletal Muscles Tissue LysateLane 3: Mouse Liver Tissue LysateLane 4: HEPA Cell LysateLane 5: NIH3T3 Cell Lysate

Anti-Solute Carrier Family 22 Member 5 Antibody - Background

Solute carrier family 22(organic cation/carnitine transporter), member 5, also called SLC22A5 or OCTN2 is a membrane transport protein associated with primary carnitine deficiency. This gene is mapped to 5q31.1. 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.