Product Name: OCTN2 Rabbit Polyclonal Antibody
Catalog #: APRab15106

Summary

Production Name	OCTN2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	SLC22A5
Alternative Names	SLC22A5; OCTN2; Solute carrier family 22 member 5; High-affinity sodium-dependent carnitine cotransporter; Organic cation/carnitine transporter 2
Gene ID	6584.0
SwissProt ID	O76082.The antiserum was produced against synthesized peptide derived from human SLC22A5. AA range:300-349

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000
Molecular Weight	65kD

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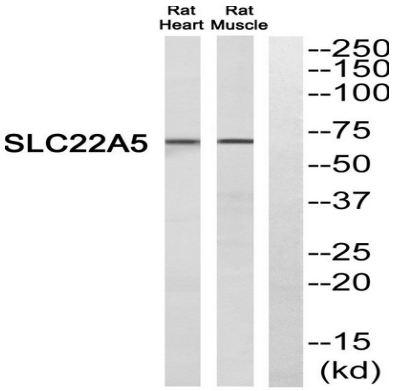
Background

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. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Apr 2015],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.,disease:Defects in SLC22A5 may be a cause of susceptibility to Crohn disease (CD) [MIM:266600]. CD is a form of remitting inflammatory bowel disease (IBD). CD may involve any part of the gastrointestinal tract, but most frequently the terminal ileum and colon. Bowel inflammation is transmural and discontinuous. CD is commonly classified as an autoimmune disease.,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.,miscellaneous:Inhibited by emetine, quinidine and verapamil. The IC(50) of emetine is 4.2 uM. Not inhibited by valproic acid.,similarity:Belongs to the major facilitator superfamily. Organic cation transporter family.,subunit:Interacts with PDZK1.,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.,

Research Area

Image Data



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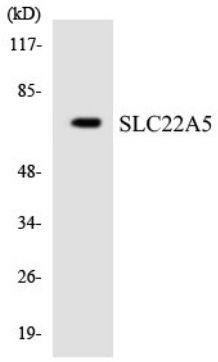
Western blot analysis of SLC22A5 Antibody. The lane on the right is blocked with the SLC22A5 peptide.



Western blot analysis of the lysates from HeLa cells using SLC22A5 antibody.

Note

For research use only.