

Product name:	OCTN2 Rabbit Polyclonal Antibody
Cat number:	ABN15106
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human SLC22A5. AA range:300-349
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight:	65kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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.,