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Immunotag™ OCTN2 Polyclonal Antibody

Antibody Specification

Catalog No.	ITT3235
Product Description	Immunotag™ OCTN2 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	OCTN2
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human SLC22A5. AA range:300-349
Specificity	OCTN2 Polyclonal Antibody detects endogenous levels of OCTN2 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	SLC22A5
Accession No.	O76082 Q9Z0E8
Alternate Names	SLC22A5; OCTN2; Solute carrier family 22 member 5; High-affinity sodium-dependent carnitine cotransporter; Organic cation/carnitine transporter 2

Antibody Specification

Description	solute carrier family 22 member 5(SLC22A5) Homo sapiens 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],
Protein Expression	Brain,Kidney,Lung,Trachea,
Subcellular Localization	plasma membrane,integral component of plasma membrane,integral component of membrane,apical plasma membrane,brush border membrane,extracellular exosome,
Protein Function	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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.