

# Immunotag™ OCT1 Monoclonal Antibody

Antibody Specification	
Catalog No.	ITM0482
Product Description	Immunotag™ OCT1 Monoclonal 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	OCT1
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,FCM,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant fragment of human OCT1 expressed in E. Coli.
Specificity	OCT1 Monoclonal Antibody detects endogenous levels of 41183 protein.
Purification	Affinity purification
Form	Ascitic fluid containing 0.03% sodium azide.
Gene Name	SLC22A1
Accession No.	O15245 O08966
Alternate Names	SLC22A1; OCT1; Solute carrier family 22 member 1; Organic cation transporter 1; hOCT1

## Antibody Specification

Description	solute carrier family 22 member 1(SLC22A1) 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. This gene is one of three similar cation transporter genes located in a cluster on chromosome 6. The encoded protein contains twelve putative transmembrane domains and is a plasma integral membrane protein. Two transcript variants encoding two different isoforms have been found for this gene, but only the longer variant encodes a functional transporter. [provided by RefSeq, Jul 2008],
Protein Expression	Caudate nucleus,Liver,
Subcellular Localization	plasma membrane,integral component of plasma membrane,membrane,integral component of membrane,basolateral plasma membrane,
Protein Function	caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,function:Translocates a broad array of organic cations with various structures and molecular weights including the model compounds 1-methyl-4-phenylpyridinium (MPP), tetraethylammonium (TEA), N-1-methylnicotinamide (NMN), 4-(4-(dimethylamino)styryl)-N-methylpyridinium (ASP), the endogenous compounds choline, guanidine, histamine, epinephrine, adrenaline, noradrenaline and dopamine, and the drugs quinine, and metformin. The transport of organic cations is inhibited by a broad array of compounds like tetramethylammonium (TMA), cocaine, lidocaine, NMDA receptor antagonists, atropine, prazosin, cimetidine, TEA and NMN, guanidine, cimetidine, choline, procainamide, quinine, tetrabutylammonium, and tetrapentylammonium. Translocates organic cations in an electrogenic and pH-independent manner. Translocates organic cations across the plasma membrane in both directions. Transports the polyamines spermine and spermidine. Transports pramipexole across the basolateral membrane of the proximal tubular epithelial cells. The choline transport is activated by MMTS. Regulated by various intracellular signaling pathways including inhibition by protein kinase A activation, and endogenously activation by the calmodulin complex, the calmodulin-dependent kinase II and LCK tyrosine kinase.,induction:In the liver activated by HNF4A and suppressed by bile acids via NR0B2. Increased by cholesterol treatment in hepatocyte cells.,PTM:Phosphorylated.,similarity:Belongs to the major facilitator superfamily. Organic cation transporter family.,tissue specificity:Widely expressed with high level in liver. Isoform 1 and isoform 2 are expressed in liver. Isoform 1, isoform 2, isoform 3 and isoform 4 are expressed in glial cell lines.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.