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Anti-OCTN2 Antibody

Catalog # AP53968

Product Information

Application	WB, IF/IC
Primary Accession	O76082
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62752

Additional Information

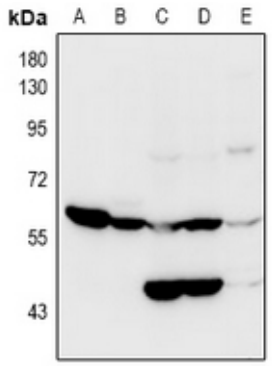
Gene ID	6584
Other Names	OCTN2; Solute carrier family 22 member 5; High-affinity sodium-dependent carnitine cotransporter; Organic cation/carnitine transporter 2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human OCTN2. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

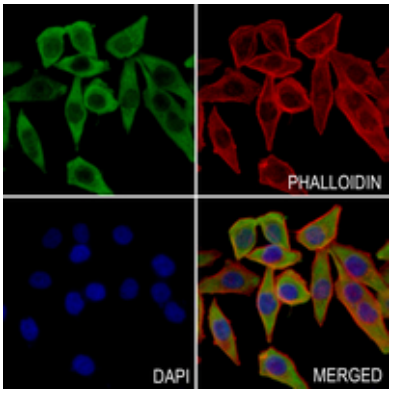
Name	SLC22A5 (HGNC:10969)
Function	Sodium-ion dependent, high affinity carnitine transporter. Involved in the active cellular uptake of carnitine. Transports one sodium ion with one molecule of carnitine (PubMed:10454528, PubMed:10525100, PubMed:10966938, PubMed:17509700, PubMed:20722056, PubMed:33124720). Also transports organic cations such as tetraethylammonium (TEA) without the involvement of sodium. Relative uptake activity ratio of carnitine to TEA is 11.3 (PubMed:10454528, PubMed:10525100, PubMed:10966938). In intestinal epithelia, transports the quorum-sensing pentapeptide CSF (competence and sporulation factor) from B.subtilis which induces cytoprotective heat shock proteins contributing to intestinal homeostasis (PubMed:18005709). May also contribute to regulate the transport of organic compounds in testis across the blood-testis-barrier (Probable).
Cellular Location	Cell membrane; Multi-pass membrane protein. Apical cell membrane;

	Multi-pass membrane protein. Basal cell membrane; Multi-pass membrane protein. Note=In intestinal cells, apical expression is induced by TNF. Localized to the basal membrane of Sertoli cells (PubMed:35307651).
Tissue Location	Strongly expressed in kidney, skeletal muscle, heart and placenta (PubMed:10454528). Primarily expressed by surface epithelial cells of the colon (at protein level) (PubMed:18005709) Expressed in CD68 macrophage and CD43 T-cells but not in CD20 B-cells (PubMed:10454528). In testis, localized to Sertoli cell basal membranes, peritubular myoid cells and Leydig cells (PubMed:35307651)

Images



Western blot analysis of OCTN2 expression in mouse kidney (A), rat kidney (B), HEK293T (C), K562 (D), Hela (E) whole cell lysates. (Predicted band size: 62 kD; Observed band size: 63 kD)



Immunofluorescent analysis of OCTN2 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.