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SLC22A4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5986b

Product Information

Application	WB, E
Primary Accession	Q9H015
Other Accession	NP_003050.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	62155
Antigen Region	514-542

Additional Information

Gene ID	6583
Other Names	Solute carrier family 22 member 4, Ergothioneine transporter, ET transporter, Organic cation/carnitine transporter 1, SLC22A4, ETT, OCTN1, UT2H
Target/Specificity	This SLC22A4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 514-542 amino acids from the C-terminal region of human SLC22A4.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SLC22A4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC22A4 (HGNC:10968)
Function	Transporter that mediates the transport of endogenous and microbial zwitterions and organic cations (PubMed:10215651, PubMed:15107849, PubMed:15795384, PubMed:16729965, PubMed:20601551, PubMed:22206629, PubMed:22569296, PubMed:29530864). Functions as a

Na(+)-dependent and pH-dependent high affinity microbial symporter of potent food-derived antioxidant ergothioeine (PubMed:15795384, PubMed:29530864, PubMed:33124720). Transports one sodium ion with one ergothioeine molecule (By similarity). Involved in the absorption of ergothioneine from the luminal/apical side of the small intestine and renal tubular cells, and into non-parenchymal liver cells, thereby contributing to maintain steady-state ergothioneine level in the body (PubMed:20601551). Also mediates the bidirectional transport of acetycholine, although the exact transport mechanism has not been fully identified yet (PubMed:22206629). Most likely exports anti-inflammatory acetylcholine in non-neuronal tissues, thereby contributing to the non- neuronal cholinergic system (PubMed:22206629, PubMed:22569296). Displays a general physiological role linked to better survival by controlling inflammation and oxidative stress, which may be related to ergothioneine and acetycholine transports (PubMed:15795384, PubMed:22206629). May also function as a low-affinity Na(+)-dependent transporter of L-carnitine through the mitochondrial membrane, thereby maintaining intracellular carnitine homeostasis (PubMed:10215651, PubMed:15107849, PubMed:16729965). May contribute to regulate the transport of cationic compounds in testis across the blood-testis- barrier (PubMed:35307651).

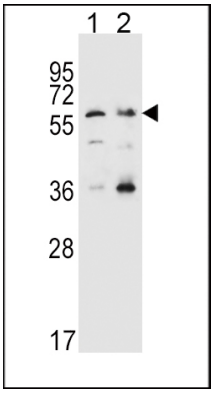
Cellular Location

Apical cell membrane; Multi-pass membrane protein. Basal cell membrane; Multi-pass membrane protein. Mitochondrion membrane; Multi-pass membrane protein. Note=Localized to the apical membrane of small intestines (PubMed:20601551). Localized to the basal membrane of Sertoli cells (PubMed:35307651).

Tissue Location

Widely expressed (PubMed:9426230). Highly expressed in kidney, trachea, ileum, bone marrow and whole blood (PubMed:15795384, PubMed:9426230). Expressed in small intestines (PubMed:20601551). Weakly expressed in skeletal muscle, prostate, lung, pancreas, placenta, heart, uterus, spleen and spinal cord (PubMed:15795384, PubMed:16729965, PubMed:9426230). Expressed in testis, primarily to the basal membrane of Sertoli cells (PubMed:16729965, PubMed:35307651). Expressed in brain (PubMed:16729965). Expressed in liver (PubMed:16729965). 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 (PubMed:15107849). Predominantly expressed in CD14 cells in peripheral blood mononuclear cells (PubMed:14608356) Expressed in fetal liver, kidney and lung (PubMed:15795384, PubMed:9426230).

Images



SLC22A4 Antibody (C-term) (Cat. #AP5986b) western blot analysis in Hela(lane 1),K562(lane 2) cell line lysates (35ug/lane).This demonstrates the SLC22A4 antibody detected the SLC22A4 protein (arrow).

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