

SLC22A4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5986b

Specification

SLC22A4 Antibody (C-term) - Product Information

WB.E Application **Primary Accession** O9H015 Other Accession NP 003050.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG **Antigen Region** 514-542

SLC22A4 Antibody (C-term) - 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

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.

SLC22A4 Antibody (C-term) - Protein Information

Name SLC22A4 (<u>HGNC:10968</u>)

Function Transporter that mediates the transport of endogenous and microbial zwitterions and organic cations (PubMed: 15795384, PubMed: 10215651, PubMed: 16729965, PubMed: 20601551,



Tel: 858.875.1900 Fax: 858.875.1999

PubMed: 22569296, PubMed: 29530864, PubMed: 15107849, PubMed: 22206629). 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 nonneuronal cholinergic system (PubMed:22569296, PubMed:22206629). 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: <u>10215651</u>, PubMed: <u>16729965</u>, PubMed: <u>15107849</u>). 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:9426230, PubMed:15795384). Expressed in small intestines (PubMed:20601551) Weakly expressed in skeletal muscle, prostate, lung, pancreas, placenta, heart, uterus, spleen and spinal cord (PubMed:9426230, PubMed:15795384, PubMed:16729965). Expressed in testis, primarily to the basal membrane of Sertoli cells (PubMed:35307651, PubMed:16729965) 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:9426230, PubMed:15795384).

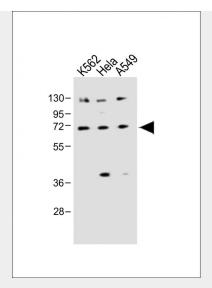
SLC22A4 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

SLC22A4 Antibody (C-term) - Images





All lanes : Anti-SLC22A4 Antibody (C-term) at 1:1000 dilution Lane 1: K562 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: A549 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 62 kDa Blocking/Dilution buffer: 5% NFDM/TBST.