

**SLC22A4 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5986b**

**Specification**

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**SLC22A4 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9H015</a>
Other Accession	<a href="#">NP_003050.2</a>
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 ([HGNC:10968](#))

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

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 ergothioneine (PubMed:[15795384](#), PubMed:[29530864](#), PubMed:[33124720](#)). Transports one sodium ion with one ergothioneine 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 acetylcholine, 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:[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 acetylcholine 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:[16729965](#), PubMed:[15107849](#)). 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

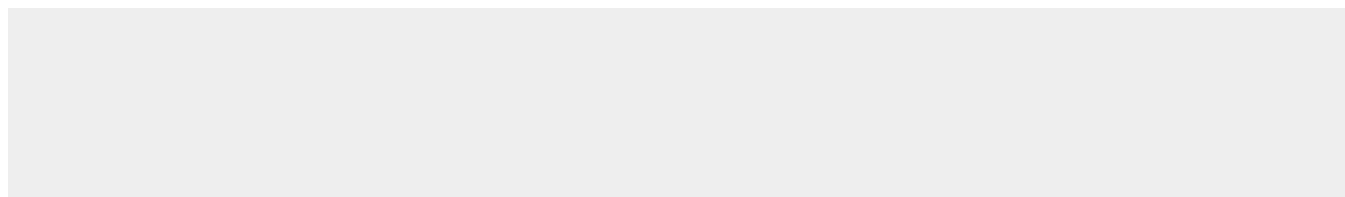
Widely expressed (PubMed:9426230). Highly expressed in kidney, trachea, ileum, bone marrow and whole blood (PubMed:9426230, PubMed:15795384). Expressed in small intestines (PubMed:20601551) Weakly expressed in skeletal muscle, prostate, lung, pancreas, placenta, heart, uterus, spleen and spinal cord (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).

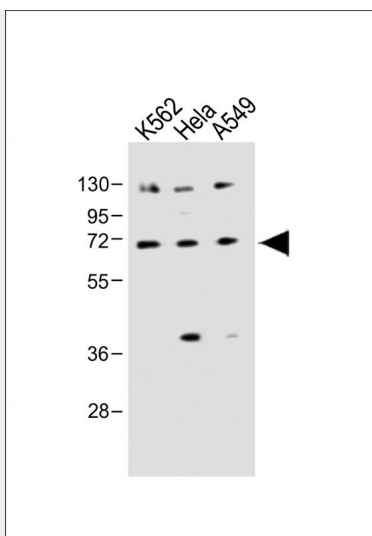
### SLC22A4 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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  $\mu$ 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.