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SLC23A1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12718a

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	Q9UHI7
Other Accession	NP_005838.3
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32316
Calculated MW	64815
Antigen Region	1-30

Additional Information

Gene ID	9963
Other Names	Solute carrier family 23 member 1, Na(+)/L-ascorbic acid transporter 1, Sodium-dependent vitamin C transporter 1, hSVCT1, Yolk sac permease-like molecule 3, SLC23A1, SVCT1, YSPL3
Target/Specificity	This SLC23A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human SLC23A1.
Dilution	IHC-P-Leica~~1:500 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	SLC23A1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC23A1 (HGNC:10974)

Function	Sodium:ascorbate cotransporter. Mediates electrogenic uptake of vitamin C, with a stoichiometry of 2 Na(+) for each ascorbate (PubMed:10556483, PubMed:10556521, PubMed:10631088, PubMed:36749388). Has retained some ancestral activity toward nucleobases such as urate, an oxidized purine. Low-affinity high-capacity sodium:urate cotransporter, may regulate serum urate levels by serving as a renal urate re-absorber (PubMed:36749388).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Highly expressed in adult small intestine, kidney, thymus, ovary, colon, prostate and liver, and in fetal kidney, liver and thymus.

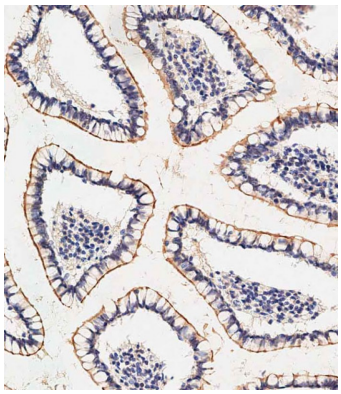
Background

The absorption of vitamin C into the body and its distribution to organs requires two sodium-dependent vitamin C transporters. This gene encodes one of the two transporters. The encoded protein is active in bulk vitamin C transport involving epithelial surfaces. Previously, this gene had an official symbol of SLC23A2. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

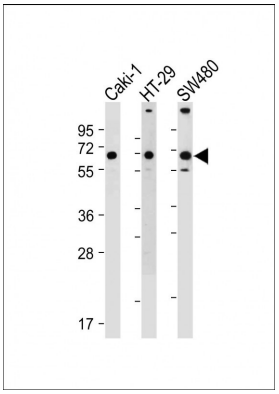
References

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Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)
Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010)
Michels, A.J., et al. Am. J. Physiol., Cell Physiol. 297 (5), C1220-C1227 (2009) :
Cahill, L.E., et al. J Nutrigenet Nutrigenomics 2(6):292-301(2009)

Images



Immunohistochemical analysis of paraffin-embedded human small intestine tissue using AP12718a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



All lanes : Anti-SLC23A1 Antibody (N-term) at 1:1000-1:2000 dilution Lane 1: Caki-1 whole cell lysate Lane 2: HT-29 whole cell lysate Lane 3: SW480 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 65 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Glyoxalate reductase/hydroxypyruvate reductase interacts with the sodium-dependent vitamin C transporter-1 to regulate cellular vitamin C homeostasis.
- Inhibition of intestinal ascorbic acid uptake by lipopolysaccharide is mediated via transcriptional mechanism(s).

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