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SLC22A5 / OCTN2 Antibody (aa282-331)

Rabbit Polyclonal Antibody
Catalog # ALS16997

Specification

SLC22A5 / OCTN2 Antibody (aa282-331) - Product Information

Application	**IHC, WB**
Primary Accession	O76082
Other Accession	6584
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**62752**

SLC22A5 / OCTN2 Antibody (aa282-331) - Additional Information

Gene ID 6584

Other Names
SLC22A5, CDSP, OCTN2VT, OCTN2, UST2

Target/Specificity
SLC22A5 Antibodyantibody detects endogenous levels of SLC22A5.

Reconstitution & Storage
PBS, pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol. Store at -20°C.

Precautions
SLC22A5 / OCTN2 Antibody (aa282-331) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC22A5 / OCTN2 Antibody (aa282-331) - 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:<a

href="http://www.uniprot.org/citations/10525100" target="_blank">10525100, PubMed:10966938). In intestinal epithelia, transports the quorum-sensing pentapeptide CSF (competence and sporulation factor) from Bacillus Subtilis wich 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)

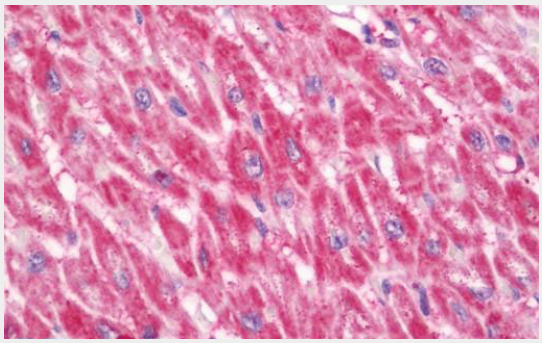
Volume
50 µl

SLC22A5 / OCTN2 Antibody (aa282-331) - Protocols

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

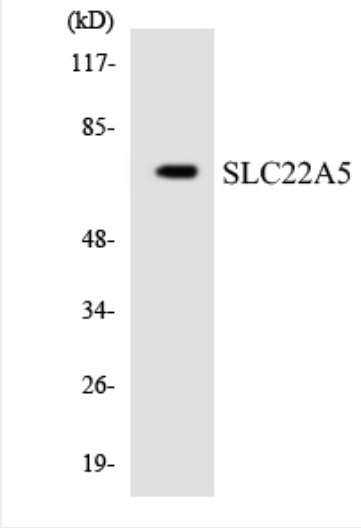
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC22A5 / OCTN2 Antibody (aa282-331) - Images



Anti-SLC22A5 / OCTN2 antibody IHC staining of human heart.

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Western blot of the lysates from HeLa cells using SLC22A5 antibody.

SLC22A5 / OCTN2 Antibody (aa282-331) - Background

Sodium-ion dependent, high affinity carnitine transporter. Involved in the active cellular uptake of carnitine. Transports one sodium ion with one molecule of carnitine. Also transports organic cations such as tetraethylammonium (TEA) without the involvement of sodium. Also relative uptake activity ratio of carnitine to TEA is 11.3.

SLC22A5 / OCTN2 Antibody (aa282-331) - References

Wu X.,et al.Biochem. Biophys. Res. Commun. 246:589-595(1998).
Tamai I.,et al.J. Biol. Chem. 273:20378-20382(1998).
Nezu J.,et al.Nat. Genet. 21:91-94(1999).
Maekawa S.,et al.Biochim. Biophys. Acta 1773:1000-1006(2007).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

SLC22A5 / OCTN2 Antibody (aa282-331) - Citations

- Glucocorticoids attenuate the sensitivity of glucocorticoid-resistant lymphoid cells to doxorubicin via reduction in OCTN2.