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SLC29A3 / ENT3 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS17109

Specification

SLC29A3 / ENT3 Antibody (N-Terminus) - Product Information

Application	**IHC, IF**
Primary Accession	Q9BZD2
Other Accession	55315
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**51815**

SLC29A3 / ENT3 Antibody (N-Terminus) - Additional Information

Gene ID 55315

Other Names
SLC29A3, ENT3, HCLAP, HJCD, HENT3, PHID

Target/Specificity
SLC29A3 antibody is human, mouse and rat reactive. At least two isoforms of SLC29A3 are known to exist; this antibody will detect both isoforms. SLC29A3 antibody is predicted to not cross-react with other SLC29 proteins.

Reconstitution & Storage
PBS, 0.02% sodium azide. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
SLC29A3 / ENT3 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC29A3 / ENT3 Antibody (N-Terminus) - Protein Information

Name SLC29A3 (HGNC:23096)

Synonyms ENT3

Function
Uniporter that mediates the facilitative transport of nucleoside across lysosomal and mitochondrial membranes (PubMed:15701636, PubMed:19164483, PubMed:20595384, PubMed:28729424). Functions as a non-electrogenic Na(+)-independent transporter (PubMed:15701636, PubMed:19164483,

PubMed:28729424). Substrate transport is pH-dependent and enhanced under acidic condition, probably reflecting the location of the transporter in acidic intracellular compartments (PubMed:15701636, PubMed:19164483, PubMed:28729424). Proton is not a cotransporting ion but most likely change the ionization state of the transporter which dictates transport- permissible/impermissible conformation for nucleoside translocation (PubMed:28729424). May direct the nucleoside transport from lysosomes to cytosol or cytosol to mitochondria to facilitate the fundamental function of salvage synthesis of nucleic acids (PubMed:28729424). Involved in the transport of nucleosides (adenosine, guanosine, uridine, thymidine, cytidine and inosine) and deoxynucleosides (deoxyadenosine, deoxycytidine) (PubMed:15701636, PubMed:19164483, PubMed:20595384, PubMed:28729424). Also mediates transport of purine nucleobases (adenine, guanine) and pyrimidine nucleobases (uracil) (PubMed:15701636, PubMed:19164483). Also able to transport monoamine neurotransmitters dopamine, serotonin, noradrenaline and tyramine (PubMed:19164483). Capable of transporting ATP (PubMed:19164483). Mediates nucleoside export from lysosomes in macrophages, which regulates macrophage functions and numbers (By similarity).

Cellular Location
Lysosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Mitochondrion membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Observed in a punctate intracellular pattern showing partial colocalization with late endosomes/lysosomes (PubMed:15701636). Detected at the cell surface only in certain placental cells (PubMed:19164483)

Tissue Location
Widely expressed in both adult and fetal tissues (PubMed:15701636). Highest levels in placenta, uterus, ovary, spleen, lymph node and bone marrow (PubMed:15701636). Expressed in liver (PubMed:19164483). Lowest levels in brain and heart (PubMed:15701636) Expressed in macrophages (PubMed:22174130)

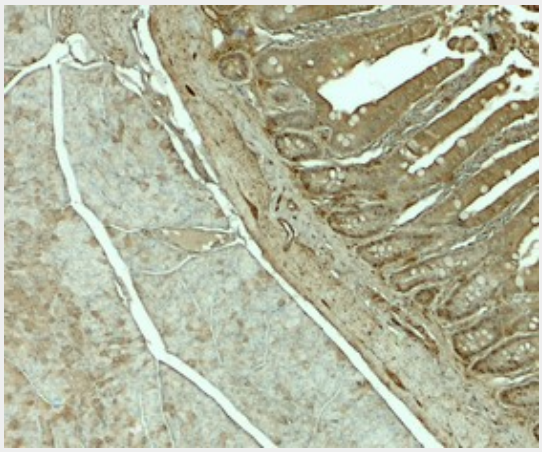
SLC29A3 / ENT3 Antibody (N-Terminus) - Protocols

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

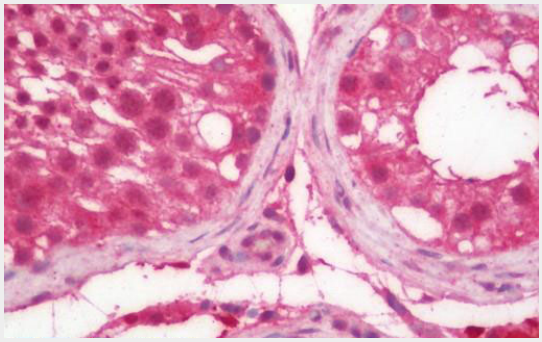
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC29A3 / ENT3 Antibody (N-Terminus) - Images

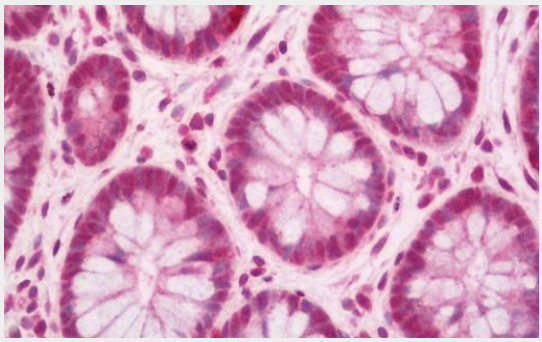
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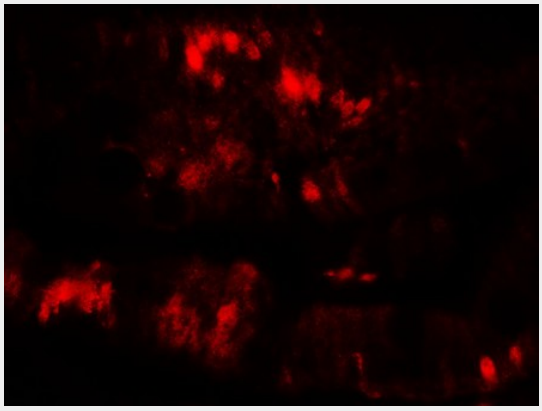
Immunohistochemistry of SLC29A3 in rat colon tissue with SLC29A3 antibody at 5 ug/mL.



Human Testis: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Colon: Formalin-Fixed, Paraffin-Embedded (FFPE)



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Immunofluorescence of SLC29A3 in rat colon muscle tissue with SLC29A3 antibody at 20 ug/mL.

SLC29A3 / ENT3 Antibody (N-Terminus) - Background

Mediates both influx and efflux of nucleosides across the membrane (equilibrative transporter). Mediates transport of adenine, adenosine and uridine, as well as several nucleoside analog drugs, such as anticancer and antiviral agents, including cladribine, cordycepin, tubercidin and AZT. Does not transport hypoxanthine.

SLC29A3 / ENT3 Antibody (N-Terminus) - References

Hyde R.J.,et al.Mol. Membr. Biol. 18:53-63(2001).
Sankar N.,et al.Nucleic Acids Res. 30:4339-4350(2002).
Tse C.-M.,et al.Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).