

SLC29A2 Antibody
Catalog # ASC11904**Specification****SLC29A2 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	Q14542
Other Accession	NP_001523 , 38708299
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 50 kDa; Observed: 50 kDa
Application Notes	KDa SLC29A2 antibody can be used for detection of SLC29A2 by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

SLC29A2 Antibody - Additional InformationGene ID **3177****Target/Specificity**

SLC29A2; SLC29A2 antibody is human specific. SLC29A2 antibody is predicted to not cross-react with other SLC29 proteins.

Reconstitution & Storage

SLC29A2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

SLC29A2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SLC29A2 Antibody - Protein InformationName SLC29A2 ([HGNC:11004](#))

Synonyms DER12, ENT2, HNP36

Function

Bidirectional uniporter involved in the facilitative transport of nucleosides and nucleobases, and contributes to maintaining their cellular homeostasis (PubMed:[10722669](http://www.uniprot.org/citations/10722669), PubMed:[12527552](http://www.uniprot.org/citations/12527552), PubMed:[12590919](http://www.uniprot.org/citations/12590919), PubMed:[16214850](http://www.uniprot.org/citations/16214850), PubMed:[21795683](http://www.uniprot.org/citations/21795683), PubMed:[9396714](http://www.uniprot.org/citations/9396714), PubMed:[9396714](#)

href="http://www.uniprot.org/citations/9478986" target="_blank">9478986). Functions as a Na(+)-independent, passive transporter (PubMed:9478986). Involved in the transport of nucleosides such as inosine, adenosine, uridine, thymidine, cytidine and guanosine (PubMed:10722669, PubMed:12527552, PubMed:12590919, PubMed:16214850, PubMed:21795683, PubMed:9396714, PubMed:9478986). Also able to transport purine nucleobases (hypoxanthine, adenine, guanine) and pyrimidine nucleobases (thymine, uracil) (PubMed:16214850, PubMed:21795683). Involved in nucleoside transport at basolateral membrane of kidney cells, allowing liver absorption of nucleoside metabolites (PubMed:12527552). Mediates apical nucleoside uptake into Sertoli cells, thereby regulating the transport of nucleosides in testis across the blood-testis-barrier (PubMed:23639800). Mediates both the influx and efflux of hypoxanthine in skeletal muscle microvascular endothelial cells to control the amount of intracellular hypoxanthine available for xanthine oxidase-mediated ROS production (By similarity).

Cellular Location

Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Note=Localized to the apical membrane of Sertoli cells.

Tissue Location

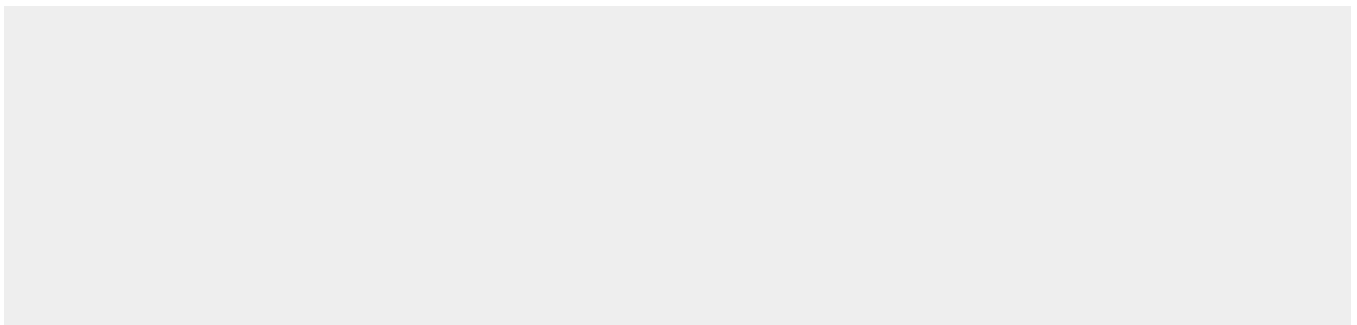
Highly expressed in skeletal muscle (PubMed:9478986). Expressed in liver, lung, placenta, brain, heart, kidney and ovarian tissues (PubMed:9478986). Expressed in testis at the blood-brain-barrier (PubMed:23639800).

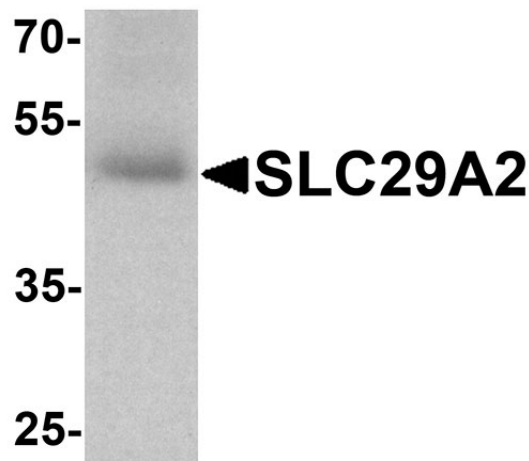
SLC29A2 Antibody - Protocols

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

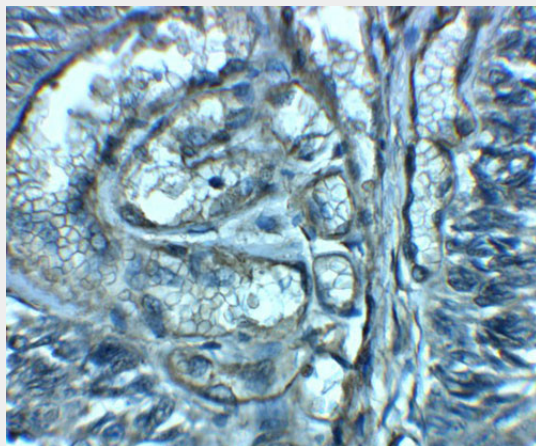
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SLC29A2 Antibody - Images

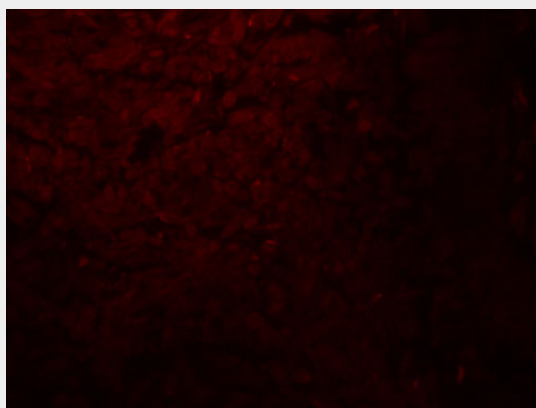




Western blot analysis of SLC29A2 in human bladder tissue lysate with SLC29A2 antibody at 1 $\mu\text{g/ml}$.



Immunohistochemistry of SLC29A2 in human bladder tissue with SLC29A2 antibody at 2.5 $\mu\text{g/ml}$.



Immunofluorescence of SLC29A2 in human bladder tissue with SLC29A2 antibody at 20 $\mu\text{g/ml}$.

SLC29A2 Antibody - Background

SLC29A2 is a member of the equilibrative nucleoside transporter family which plays a key role in nucleoside and nucleobase uptake for salvage pathways of nucleotide synthesis (1,2). SLC29A2 is a transmembrane glycoprotein that mediates the cellular uptake of nucleosides from the surrounding medium (3). As a nucleoside transporter, SLC29A2 plays an important role in the uptake of nucleoside-based anti-cancer drugs; polymorphisms of point mutations in the gene encoding this

protein may affect the efficacy of these drugs (4).

SLC29A2 Antibody - References

Williams JB and Lanahan AA. A mammalian delayed-early response gene encodes HNP36, a novel, conserved nucleolar protein. *Biochim. Biophys. Res. Commun.* 1995; 213:325-33.

Young JD, Yao SY, Baldwin JM, et al. The human concentrative and equilibrative nucleoside transporter families, SLC28 and SLC29. *Mol. Aspects. Med.* 34:529-47.

Mangravite LM, Xiao G, and Giacomini KM. Localization of human equilibrative nucleoside transporters, hENT1 and hENT2, in renal epithelial cells. *Am. J. Physiol. Renal Physiol.* 284:F902-10.

Owen RP, Lagpacan LL, Taylor TR, et al. Functional characterization and haplotype analysis of polymorphisms in the human equilibrative nucleoside transporter, ENT2. *Drug Metab. Dispos.* 2006; 34:12-5.