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SLC29A2 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22096a

Specification

SLC29A2 Antibody (N-Term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q14542
Reactivity	**Human**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**50113**
Antigen Region	**1-31**

SLC29A2 Antibody (N-Term) - Additional Information

Gene ID 3177

Other Names
Equilibrative nucleoside transporter 2, 36 kDa nucleolar protein HNP36, Delayed-early response protein 12, Equilibrative nitrobenzylmercaptopurine riboside-insensitive nucleoside transporter, Equilibrative NBMPR-insensitive nucleoside transporter, Hydrophobic nucleolar protein, 36 kDa, Nucleoside transporter, ei-type, Solute carrier family 29 member 2, SLC29A2, DER12, ENT2, HNP36

Target/Specificity
This SLC29A2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1-31 amino acids from human SLC29A2.

Dilution
WB~~1:2000
IHC-P~~1:25
FC~~1:25

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
SLC29A2 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC29A2 Antibody (N-Term) - Protein Information

Name 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, PubMed:12527552, PubMed:12590919, PubMed:16214850, PubMed:21795683, PubMed:9396714, PubMed: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 (N-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 Cytomety
- Cell Culture

SLC29A2 Antibody (N-Term) - Images

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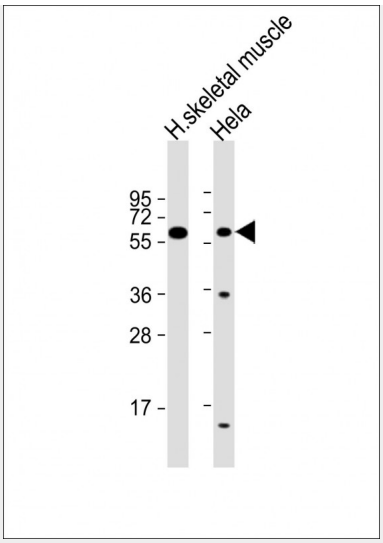
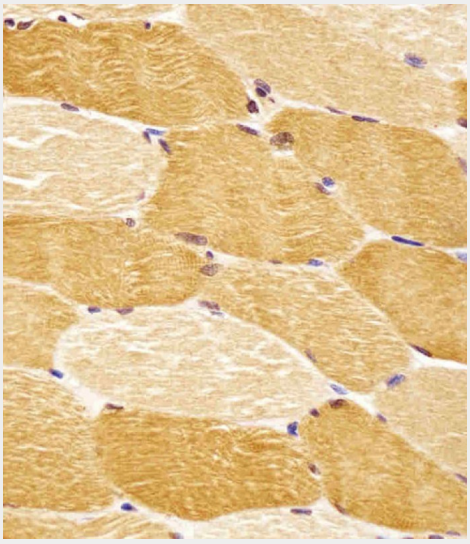
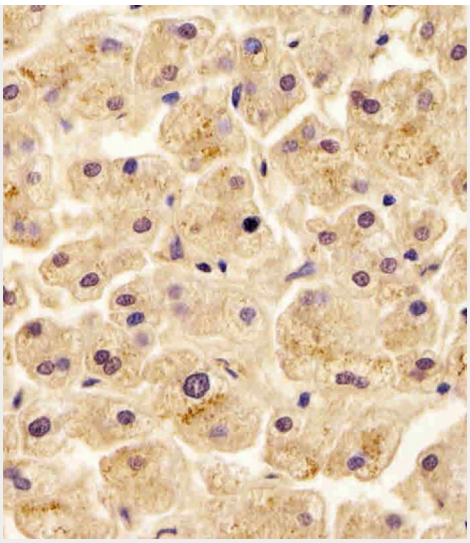


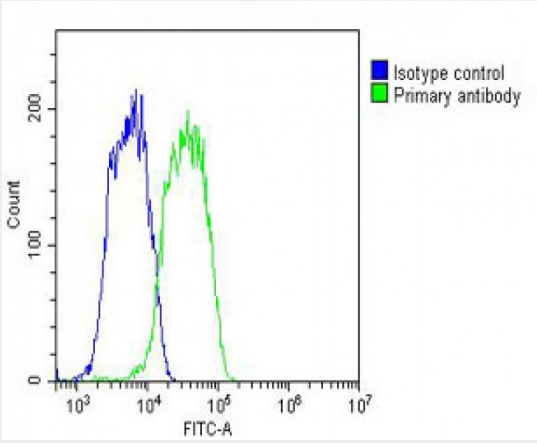
All lanes : Anti-SLC29A2 Antibody (N-Term) at 1:2000 dilution Lane 1: human skeletal muscle lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AP22096a staining SLC29A2 in human skeletal muscle tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AP22096a staining SLC29A2 in human liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing HepG2 cells stained with AP22096a (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22096a, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

SLC29A2 Antibody (N-Term) - Background

Mediates equilibrative transport of purine, pyrimidine nucleosides and the purine base hypoxanthine. Very less sensitive than SLC29A1 to inhibition by nitrobenzylthioinosine (NBMPR), dipyridamole, dilazep and draflazine.

SLC29A2 Antibody (N-Term) - References

Williams J.B.,et al.Biochem. Biophys. Res. Commun. 213:325-333(1995).
Griffiths M.,et al.Biochem. J. 328:739-743(1997).

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Mangravite L.M.,et al.Am. J. Physiol. 284:F902-F910(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).