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Anti-ENT2 Antibody

Catalog # AP60163

Product Information

Application	WB, IF/IC
Primary Accession	Q14542
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50113

Additional Information

Gene ID	3177
Other Names	DER12; ENT2; HNP36; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ENT2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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). Also mediates nicotinamide uptake supporting homeostasis and modulating its biological activities (PubMed:39885119). Can also transport urate (PubMed:40367900). 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).

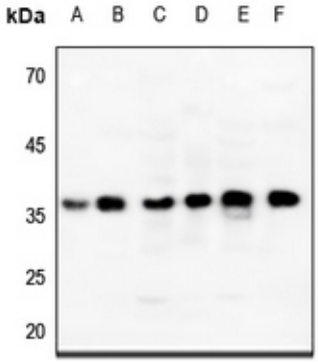
Cellular Location

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

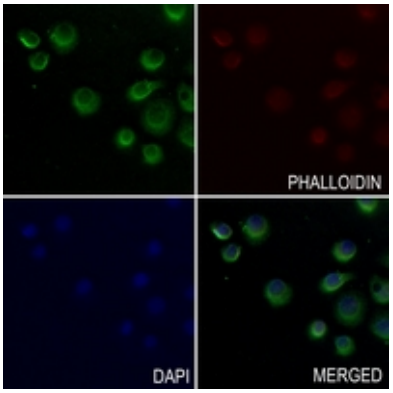
Tissue Location

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).

Images



Western blot analysis of ENT2 expression in Hela (A), mouse muscle (B), mouse lung (C), mouse brain (D), rat liver (E), rat heart (F) whole cell lysates. (Predicted band size: 50 kD; Observed band size: 36 kD)



Immunofluorescent analysis of ENT2 staining in SGC7901 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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