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ENT1 Rabbit pAb

Catalog # AP98760

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q99808
Other Accession	Q99808
Reactivity	Human
Predicted	Rat, Orangutan, Mouse, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50219
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ENT1/SLC29A1
Epitope Specificity	201-300/456
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the SLC29A transporter family.
Post-translational modifications	Glycosylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Equilibrative nucleoside transporters (ENTs) regulate many physiological processes and are widely distributed in mammals, plants, yeasts, insects, nematodes and protozoans. They enable facilitated diffusion of hydrophilic nucleosides, such as adenosine and nucleoside analogs, across cell membranes. ENTs are required for uptake of antiviral and anticancer nucleoside drugs and influence a variety of physiological processes, such as neurotransmission and platelet aggregation, by regulating the amount of adenoside available to cell surface receptors. Equilibrative nucleoside transporter 1 (ENT1), also designated solute carrier family 29 (nucleoside transporters), member 1, belongs to the SLC29A transporter family and is a mammalian ENT isoform. ENT1, along with ENT3, mediates the majority of influx and efflux of nucleosides across the plasma membrane.

Additional Information

Gene ID	2030
Other Names	AUG; ENT1; hENT1; 1200014D21Rik; mENT1; S29A1_HUMAN; SLC29A1; Equilibrative nitrobenzylmercaptopurine riboside-sensitive nucleoside transporter (Equilibrative NBMPR-sensitive nucleoside transporter | es nucleoside transporter); Nucleoside transporter, es-type; Solute carrier family 29 member 1; S29A1_MOUSE; Equilibrative nitrobenzylmercaptopurine riboside-sensitive nucleoside transporter (Equilibrative NBMPR-sensitive

	nucleoside transporter); solute carrier family 29 member 1 (Augustine blood group); solute carrier family 29 (equilibrative nucleoside transporter), member 1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SLC29A1 (HGNC:11003)
Synonyms	ENT1
Function	Uniporter involved in the facilitative transport of nucleosides and nucleobases, and contributes to maintaining their cellular homeostasis (PubMed:10722669, PubMed:10755314, PubMed:12527552, PubMed:14759222, PubMed:15037197, PubMed:17379602, PubMed:21795683, PubMed:26406980, PubMed:27995448, PubMed:35790189, PubMed:8986748). Functions as a Na(+)-independent transporter (PubMed:8986748). Involved in the transport of nucleosides such as adenosine, guanosine, inosine, uridine, thymidine and cytidine (PubMed:10722669, PubMed:10755314, PubMed:12527552, PubMed:14759222, PubMed:15037197, PubMed:17379602, PubMed:26406980, PubMed:8986748, PubMed:39737929). Also transports purine nucleobases (hypoxanthine, adenine, guanine) and pyrimidine nucleobases (thymine, uracil) (PubMed:21795683, PubMed:27995448). Also mediates the uptake of nicotinamide; contributes to maintaining nicotinamide homeostasis but also regulated nicotinamide biological roles (PubMed:39885119). Mediates basolateral nucleoside uptake into Sertoli cells, thereby regulating the transport of nucleosides in testis across the blood-testis barrier (By similarity). Regulates inosine levels in brown adipocytes tissues (BAT) and extracellular inosine levels, which controls BAT-dependent energy expenditure (PubMed:35790189).
Cellular Location	Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Localized to the basolateral membrane of Sertoli cells (PubMed:23639800). Localized to the cell membrane of erythrocytes (PubMed:11584005, PubMed:23219802).
Tissue Location	Expressed in testis at the blood-testis barrier (at protein level) (PubMed:23639800). Detected in erythrocytes (at protein level) (PubMed:11584005, PubMed:23219802). Expressed at relatively high levels in cerebral cortex, particularly the frontal and parietal lobes, and the thalamus and basal ganglia (at protein level) (PubMed:11311901). In the midbrain expressed at moderate levels, whereas in the other areas of the brainstem, namely medulla and pons, cerebellum and the hippocampus expressed at lower amounts when compared to the other brain regions (at protein level) (PubMed:11311901) Expressed in Langerhans cells and lymphocytes in the pancreas (at protein level) (PubMed:15501974). Expressed in kidney, in polarized renal epithelial cells (PubMed:12527552). Expressed in adipose tissues (PubMed:35790189). Expressed in placenta (PubMed:8986748). Expressed in small intestine (PubMed:10755314).

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