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ENT1 Polyclonal Antibody

Catalog # AP73214

Product Information

Application	WB, E
Primary Accession	Q99808
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50219

Additional Information

Gene ID	2030
Other Names	SLC29A1; ENT1; Equilibrative nucleoside transporter 1; Equilibrative nitrobenzylmercaptopurine riboside-sensitive nucleoside transporter;Equilibrative NBMPR-sensitive nucleoside transporter; Nucleoside transporter, es-type; Solute carrier family 29 member 1
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

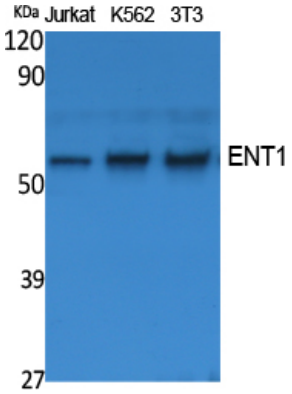
Name	SLC29A1 (HGNC:11003)
Synonyms	ENT1
Function	Uniporter involved in the facilitative transport of nucleosides and nucleobases, and contributes to maintaining their cellular homeostasis (PubMed:10722669, PubMed:10755314, PubMed:12527552, PubMed:14759222, PubMed:15037197, PubMed:17379602, PubMed:21795683, 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). Also transports purine nucleobases (hypoxanthine, adenine, guanine) and pyrimidine nucleobases (thymine, uracil) (PubMed:21795683, PubMed:27995448). 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).

Background

Mediates both influx and efflux of nucleosides across the membrane (equilibrative transporter). It is sensitive (ES) to low concentrations of the inhibitor nitrobenzylmercaptopurine riboside (NBMPR) and is sodium-independent. It has a higher affinity for adenosine. Inhibited by dipyridamole and dilazep (anticancer chemotherapeutics drugs).

Images



Western Blot analysis of extracts from Jurkat, K562, NIH-3T3 cells, using ENT1 Polyclonal Antibody. Antibody was diluted at 1:2000. Secondary antibody was diluted at 1:20000