10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CNT1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51864

Product Information

Application	WB
Primary Accession	O00337
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71584

Additional Information

Gene ID	9154
Other Names	Sodium/nucleoside cotransporter 1, Concentrative nucleoside transporter 1, CNT 1, hCNT1, Na(+)/nucleoside cotransporter 1, Sodium-coupled nucleoside transporter 1, Solute carrier family 28 member 1, SLC28A1, CNT1
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SLC28A1 (HGNC:11001)
Function	Sodium and pyrimidine nucleoside symporter of the plasma membrane that imports uridine, thymidine and cytidine into cells by coupling their transport to the transmembrane sodium electrochemical gradient. Also transports adenosine, an atypical substrate transported with high apparent affinity, but low maximum velocity. Therefore, exhibits the transport characteristics of the nucleoside transport system cit or N2 subtype (N2/cit) (PubMed:10455109, PubMed:14701834, PubMed:15194733, PubMed:21795683, PubMed:21998139, PubMed:30658162, PubMed:32126230, PubMed:9124315). Involved in renal nucleoside (re)absorption (PubMed:30658162).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q62674}. Apical cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q62674}
Tissue Location	Expressed in kidney..

Background

Sodium-dependent and pyrimidine-selective. Exhibits the transport characteristics of the nucleoside transport system cit or N2 subtype (N2/cit) (selective for pyrimidine nucleosides and adenosine). It also transports the antiviral pyrimidine nucleoside analogs 3'-azido-3'-deoxythymidine (AZT) and 2',3'-dideoxycytidine (ddC). It may be involved in the intestinal absorption and renal handling of pyrimidine nucleoside analogs used to treat acquired immunodeficiency syndrome (AIDS). It has the following selective inhibition: adenosine, thymidine, cytidine, uridine >> guanosine, inosine.

References

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Ritzel M.W.L.,et al.Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Zody M.C.,et al.Nature 440:671-675(2006).
Loewen S.K.,et al.J. Biol. Chem. 274:24475-24484(1999).