

ENT2 (N-20): sc-48494

BACKGROUND

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 adenosine available to cell surface receptors. Equilibrative nucleoside transporter 2 (ENT2), also designated solute carrier family 29 (nucleoside transporters), member 2, belongs to the SLC29A transporter family and is a mammalian ENT isoform. ENT2 mediates the equilibrative transport of hypoxanthine in addition to nucleosides and is purine-selective.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602193. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Leung, G.P., Man, R.Y. and Tse, C.M. 2005. Effect of thiazolidinediones on equilibrative nucleoside transporter-1 in human aortic smooth muscle cells. *Biochem. Pharmacol.* 70: 355-362.
3. Takagaki, K., Katsuma, S., Kaminishi, Y., Horio, T., Nakagawa, S., Tanaka, T., Ohgi, T. and Yano, J. 2005. Gene-expression profiling reveals downregulation of transporter 1 (ENT1) in Ara-C-resistant CCRF-CEM-derived cells. *J. Biochem.* 136: 733-740.
4. Sarkar, M., Han, T., Damaraju, V., Carpenter, P., Cass, C.E. and Agarwal, R.P. 2005. Cytosine arabinoside affects multiple cellular factors and induces drug resistance in human lymphoid cells. *Biochem. Pharmacol.* 70: 426-432.
5. Sakowicz, M., Szutowicz, A. and Pawelczyk, T. 2005. Differential effect of Insulin and elevated glucose level on adenosine transport in rat B lymphocytes. *Int. Immunol.* 17: 145-154.
6. Kato, R., Maeda, T., Akaike, T. and Tamai, I. 2005. Nucleoside transport at the blood-testis barrier studied with primary-cultured sertoli cells. *J. Pharmacol. Exp. Ther.* 312: 601-608.
7. Stolk, M., Cooper, E., Vilk, G., Litchfield, D.W. and Hammond, J.R. 2005. Subtype-specific regulation of equilibrative nucleoside transporters by protein kinase CK2. *Biochem. J.* 386: 281-289.

CHROMOSOMAL LOCATION

Genetic locus: SLC29A2 (human) mapping to 11q13.2; Slc29a2 (mouse) mapping to 19 A.

SOURCE

ENT2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ENT2 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48494 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ENT2 (N-20) is recommended for detection of ENT2 isoform 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ENT2 siRNA (h): sc-60585, ENT2 siRNA (m): sc-60586, ENT2 shRNA Plasmid (h): sc-60585-SH, ENT2 shRNA Plasmid (m): sc-60586-SH, ENT2 shRNA (h) Lentiviral Particles: sc-60585-V and ENT2 shRNA (m) Lentiviral Particles: sc-60586-V.

Molecular Weight of ENT2: 50-55 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **ENT2 (D-9): sc-373871** or **ENT2 (A-8): sc-373872**, our highly recommended monoclonal alternatives to ENT2 (N-20).