SANTA CRUZ BIOTECHNOLOGY, INC.

ENT2 (m): 293T Lysate: sc-120050

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 adenoside 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 (mouse) mapping to 19 A.

PRODUCT

ENT2 (m): 293T Lysate represents a lysate of mouse ENT2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

ENT2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ENT2 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

PROTOCOLS

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