SANTA CRUZ BIOTECHNOLOGY, INC.

ENT1 (H-115): sc-134501

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 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.

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. Mangravite, L.M., et al. 2003. Localization of human equilibrative nucleoside transporters, hENT1 and hENT2, in renal epithelial cells. Am. J. Physiol. Renal Physiol. 284: 902-910.

CHROMOSOMAL LOCATION

Genetic locus: SLC29A1 (human) mapping to 6p21.1; Slc29a1 (mouse) mapping to 17 B3.

SOURCE

ENT1 (H-115) is a rabbit polyclonal antibody raised against amino acids 226-340 mapping within an internal region of ENT1 of human origin.

PRODUCT

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

APPLICATIONS

ENT1 (H-115) is recommended for detection of ENT1 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 ENT1 siRNA (h): sc-60583, ENT1 siRNA (m): sc-60584, ENT1 shRNA Plasmid (h): sc-60583-SH, ENT1 shRNA Plasmid (m): sc-60584-SH, ENT1 shRNA (h) Lentiviral Particles: sc-60583-V and ENT1 shRNA (m) Lentiviral Particles: sc-60584-V.

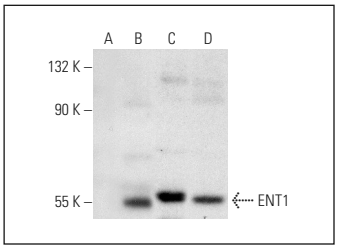
Molecular Weight of ENT1: 50-55 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

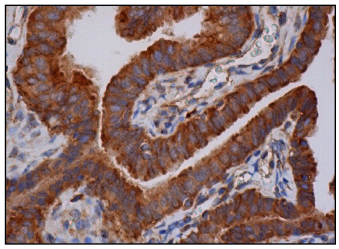
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ENT1 (H-115): sc-134501. Western blot analysis of ENT1 expression in non-transfected 293T: sc-117752 (**A**), mouse ENT1 transfected 293T: sc-120049 (**B**), Jurkat (**C**) and HeLa (**D**) whole cell lysates.



ENT1 (H-115): sc-134501. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells.

STORAGE

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

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.

MONOS Satisfaction Guaranteed

Try **ENT1 (F-12): sc-377283** or **ENT1 (G-6): sc-515240**, our highly recommended monoclonal alternatives to ENT1 (H-115). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **ENT1 (F-12): sc-377283**.