

ENT1 (K-15): sc-48488

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.

CHROMOSOMAL LOCATION

Genetic locus: Slc29a2 (mouse) mapping to 17 B3.

SOURCE

ENT1 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of ENT1 of mouse origin.

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-48488 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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.

APPLICATIONS

ENT1 (K-15) is recommended for detection of ENT1 of 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 (m): sc-60584, ENT1 siRNA (r): sc-270325, ENT1 shRNA Plasmid (m): sc-60584-SH, ENT1 shRNA Plasmid (r): sc-270325-SH, ENT1 shRNA (m) Lentiviral Particles: sc-60584-V and ENT1 shRNA (r) Lentiviral Particles: sc-270325-V.

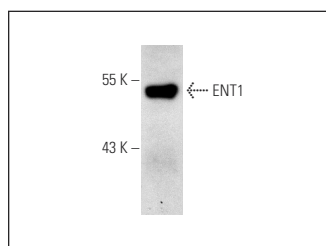
Molecular Weight of ENT1: 50-55 kDa.

Positive Controls: mouse heart extract: sc-2254 or rat heart extract: sc-2393.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



ENT1 (K-15): sc-48488. Western blot analysis of ENT1 expression in mouse heart tissue extract.

SELECT PRODUCT CITATIONS

1. Robillard, K.R., et al. 2008. Characterization of mENT1δ11, a novel alternative splice variant of the mouse equilibrative nucleoside transporter 1. *Mol. Pharmacol.* 74: 264-273.
2. Lu, G., et al. 2010. Chronic morphine treatment impaired hippocampal long-term potentiation and spatial memory via accumulation of extracellular adenosine acting on adenosine A1 receptors. *J. Neurosci.* 30: 5058-5070.

PROTOCOLS

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



Try **ENT1 (F-12): sc-377283** or **ENT1 (G-6): sc-515240**, our highly recommended monoclonal alternatives to ENT1 (K-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **ENT1 (F-12): sc-377283**.