SANTA CRUZ BIOTECHNOLOGY, INC.

ENT4 (V-12): sc-164272

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ENT4 (equilibrative nucleoside transporter 4), also known as SLC29A4 (solute carrier family 29 member 4) or PMAT, is a 530 amino acid plasma membrane protein that is involved in the transport of various compounds throughout the body. Highly expressed in skeletal muscle and brain with weaker expression in heart, kidney and liver, ENT4 functions to transport monoamine molecules, such as dopamine and serotonin, to various areas of the brain. ENT4 is thought to catalyze the reuptake of these molecules into presynaptic neurons, thereby regulating neural signaling events. Although the activity of ENT4 is not dependent upon the intracellular concentrations of ions such as calcium and sodium, its activity is thought to be sensitive to changes in membrane potential. Multiple isoforms of ENT4 are expressed due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: SLC29A4 (human) mapping to 7p22.1; Slc29a4 (mouse) mapping to 5 G2.

SOURCE

ENT4 (V-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of ENT4 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.

Blocking peptide available for competition studies, sc-164272 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ENT4 (V-12) is recommended for detection of ENT4 of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ENT family members.

ENT4 (V-12) is also recommended for detection of ENT4 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ENT4 siRNA (h): sc-89525, ENT4 siRNA (m): sc-144898, ENT4 shRNA Plasmid (h): sc-89525-SH, ENT4 shRNA Plasmid (m): sc-144898-SH, ENT4 shRNA (h) Lentiviral Particles: sc-89525-V and ENT4 shRNA (m) Lentiviral Particles: sc-144898-V.

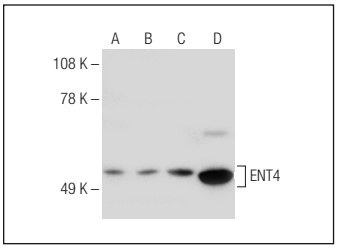
Molecular Weight of ENT4: 58 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, A-10 cell lysate: sc-3806 or mouse heart extract: sc-2254.

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.

DATA



ENT4 (V-12): sc-164272. Western blot analysis of ENT4 expression in PC-12 (**A**) and A-10 (**B**) whole cell lysates and rat brain (**C**) and mouse heart (**D**) tissue extracts.

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 **ENT4 (SA-18): sc-101295**, our highly recommended monoclonal alternative to ENT4 (V-12).