

CNT2 (C-20): sc-48133

BACKGROUND

The concentrative nucleoside transporter (CNT) family comprises three members: CNT1, CNT2 and CNT3. CNT2 participates in the absorption and disposition of endogenous nucleosides and mediates the first step of nucleotide biosynthesis. CNT2 levels are highly dependent on Insulin (but not glucose) concentration, and the protein is under the control of the Adenosine 1 receptor. CNT family members are imperative in the response of cells to a variety of anticancer and antiviral nucleoside analogs, as the CNT proteins modulate their entry into target tissues. Increasing evidence also suggests that CNT2 may have a role in energy metabolism because activation of CNT2 relies on the opening of ATP-sensitive K⁺ channels.

REFERENCES

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3. Sakowicz, M., et al. 2005. Differential effect of Insulin and elevated glucose level on adenosine transport in rat B lymphocytes. *Int. Immunol.* 17: 145-154.
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CHROMOSOMAL LOCATION

Genetic locus: SLC28A2 (human) mapping to 15q21.1; Slc28a2 (mouse) mapping to 2 E5.

SOURCE

CNT2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CNT2 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-48133 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CNT2 (C-20) is recommended for detection of CNT2 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).

CNT2 (C-20) is also recommended for detection of CNT2 in additional species, including bovine and porcine.

Suitable for use as control antibody for CNT2 siRNA (h): sc-60423, CNT2 siRNA (m): sc-60424, CNT2 shRNA Plasmid (h): sc-60423-SH, CNT2 shRNA Plasmid (m): sc-60424-SH, CNT2 shRNA (h) Lentiviral Particles: sc-60423-V and CNT2 shRNA (m) Lentiviral Particles: sc-60424-V.

Molecular Weight of CNT2: 72 kDa.

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.

STORAGE

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

PROTOCOLS

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