SANTA CRUZ BIOTECHNOLOGY, INC.

NaDC-3 (G-17): sc-85775

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NaDC-3 (Na^+/dicarboxylate cotransporter 3), also known as SLC13A3 (solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 3) or SDCT2 (sodium-dependent high-affinity dicarboxylate transporter 2), is a 602 amino acid multi-pass membrane protein and high-affinity sodium-dicarboxylate cotransporter that exists as four alternatively spliced isoforms. As a member of the solute carrier family 13 (SLC13) gene family, NaDC-3 couples the transport of sodium and Krebs cycle intermediates, including succinate and citrate, across the plasma membrane. NaDC-3 binds three sodium ions followed by a divalent anion substrate, which results in one positive charge across the membrane. The gene encoding human NaDC-3 is localized to chromosome 20 and is expressed in kidney, liver, placenta, brain and pancreas.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC13A3 (human) mapping to 20q13.12; Slc13a3 (mouse) mapping to 2 H3.

SOURCE

NaDC-3 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NaDC-3 of human origin.

STORAGE

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

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-85775 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NaDC-3 (G-17) is recommended for detection of NaDC-3 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); non cross-reactive with NaDC-1.

Suitable for use as control antibody for NaDC-3 siRNA (h): sc-75859, NaDC-3 siRNA (m): sc-149796, NaDC-3 shRNA Plasmid (h): sc-75859-SH, NaDC-3 shRNA Plasmid (m): sc-149796-SH, NaDC-3 shRNA (h) Lentiviral Particles: sc-75859-V and NaDC-3 shRNA (m) Lentiviral Particles: sc-149796-V.

Molecular Weight of NaDC-3 soforms 1/2/3/4: 67/26/58/38 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.

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 **NaDC-3 (3A6): sc-293347**, our highly recommended monoclonal alternative to NaDC-3 (G-17).