SANTA CRUZ BIOTECHNOLOGY, INC.

DNB5 (D-14): sc-164200

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DNB5 (deleted in neuroblastoma 5 protein), also known as PAST-A (proton-associated sugar transporter A) or SLC45A1, is a 748 amino acid member of the GPH cation symporter transporter family. Localized to membrane, DNB5 mediates the uptake of glucose along the pH gradient. DNB5 is expressed in brain, kidney, heart and muscle. The gene that encodes DNB5 maps to human chromosome 1, which is the largest human chromosome spanning approximately 260 million base pairs. Notable diseases associated with chromosome 1 include Hutchinson-Gilford progeria, familial adenomatous polyposis, Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome. A breakpoint in 1q, which disrupts the DISC1 gene, is linked to schizophrenia. Aberrations in chromosome 1 exist in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC45A1 (human) mapping to 1p36.23; Slc45a1 (mouse) mapping to 4 E2.

SOURCE

DNB5 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DNB5 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-164200 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DNB5 (D-14) is recommended for detection of DNB5 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).

DNB5 (D-14) is also recommended for detection of DNB5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DNB5 siRNA (h): sc-88721, DNB5 siRNA (m): sc-143118, DNB5 shRNA Plasmid (h): sc-88721-SH, DNB5 shRNA Plasmid (m): sc-143118-SH, DNB5 shRNA (h) Lentiviral Particles: sc-88721-V and DNB5 shRNA (m) Lentiviral Particles: sc-143118-V.

Molecular Weight of DNB5: 81 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.

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.