



NHEDC1 (N-20): sc-160587

BACKGROUND

The Na⁺/H⁺ exchangers (NHEs) catalyze the transport of Na⁺ in exchange for H⁺ across membranes in organisms and are required for numerous physiological processes. NHEDC1 (Na⁺/H⁺ exchanger domain containing 1), also known as sodium/hydrogen exchanger-like domain-containing protein 1 or NHE domain-containing protein 1, is a 515 amino acid multi-pass membrane protein belonging to the monovalent cation:proton antiporter 1 (CPA1) transporter family. Only expressed in testis, NHEDC1 is highly conserved in mammals including human, mouse, rat and *Macaca fascicularis*. The gene encoding NHEDC1 maps to human chromosome 4, which houses nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NHEDC1 (human) mapping to 4q24.

SOURCE

NHEDC1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NHEDC1 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-160587 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

NHEDC1 (N-20) is recommended for detection of NHEDC1 of 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 NHEDC2.

Suitable for use as control antibody for NHEDC1 siRNA (h): sc-89177, NHEDC1 shRNA Plasmid (h): sc-89177-SH and NHEDC1 shRNA (h) Lentiviral Particles: sc-89177-V.

Molecular Weight of NHEDC1: 56 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.