

sNHE (C-13): sc-99634

BACKGROUND

Na⁺/H⁺ (sodium/hydrogen) exchangers are integral membrane proteins that are expressed in most mammalian tissues, where they regulate intracellular pH and cell volume. NHEs mediate the transport of hydrogen (H⁺) ions out of cells in exchange for extracellular sodium (Na⁺) ions. sNHE (sperm-specific Na⁺/H⁺ exchanger), also known as SLC9A10 (solute carrier family 9, member 10) or NHE-10, is a 1,177 amino acid sperm-specific sodium/hydrogen exchanger that regulates intracellular pH in spermatozoa. A multi-pass membrane protein, sNHE is essential in sperm motility, male fertility and plays a role in sperm cell hyperactivation. sNHE exists as two alternatively spliced isoforms that are encoded by a gene located on human chromosome 3, and contains one cyclic nucleotide-binding domain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC9A10 (human) mapping to 3q13.2.

SOURCE

sNHE (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of sNHE 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-99634 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

sNHE (C-13) is recommended for detection of sNHE 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).

Suitable for use as control antibody for sNHE siRNA (h): sc-78109, sNHE shRNA Plasmid (h): sc-78109-SH and sNHE shRNA (h) Lentiviral Particles: sc-78109-V.

Molecular Weight of sNHE: 135 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.