

# NHE-7 (K-22): sc-102037

## BACKGROUND

Na<sup>+</sup>/H<sup>+</sup> exchangers-1–8 (also designated NHE-1–8 or Na<sup>+</sup>/H<sup>+</sup> antiporters) 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<sup>+</sup>) ions out of cells in exchange for extracellular sodium (Na<sup>+</sup>) ions. While NHE-1 is ubiquitously expressed, the NHE isoforms 2-8 have distinct tissue- and cell type-dependent expression and inhibitory characteristics. Also, all NHE family members, except NHE-6 and NHE-7, which are located intracellularly, reside in the sarcolemmal membrane. NHE-7 interacts with tyrosinase related protein-1 (TRP-1) to regulate melanosome pH and tyrosinase activity in human melanocytes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SLC9A7 (human) mapping to Xp11.3; Slc9a7 (mouse) mapping to X A1.3.

## 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.

## SOURCE

NHE-7 (K-22) is a purified rabbit polyclonal antibody raised against NHE-7 of human origin.

## PRODUCT

Each vial contains 50 >µg IgG in 500 >µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

NHE-7 (K-22) is recommended for detection of NHE-7 of mouse, rat, human, dog and zebra fish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NHE-7 siRNA (h): sc-91260, NHE-7 siRNA (m): sc-149956, NHE-7 shRNA Plasmid (h): sc-91260-SH, NHE-7 shRNA Plasmid (m): sc-149956-SH, NHE-7 shRNA (h) Lentiviral Particles: sc-91260-V and NHE-7 shRNA (m) Lentiviral Particles: sc-149956-V.

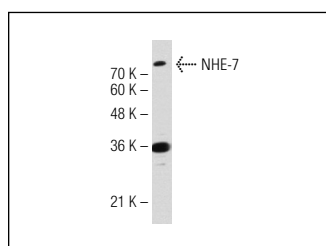
Molecular Weight of NHE-7: 80 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



NHE-7 (K-22): sc-102037. Western blot analysis of NHE-7 expression in Jurkat whole cell lysate.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.