

Na⁺ CP type VII α (C-19): sc-130097

BACKGROUND

Voltage-gated sodium channels are selective ion channels that regulate the permeability of sodium ions in excitable cells. During the propagation of an action potential, sodium channels allow an influx of sodium ions, which rapidly depolarize the cell. The three glycoproteins that comprise the voltage-gated sodium channel proteins include a pore-forming α subunit, a noncovalently associated β 1 subunit and a disulfide-linked β 2 subunit. Na⁺ CP type VII α (sodium channel protein type 7 subunit α), also known as SCN6A, sodium channel protein cardiac and skeletal muscle subunit α and putative voltage-gated sodium channel subunit α Na_x, is a 1,682 amino acid multi-pass membrane protein that belongs to the sodium channel family. Primarily expressed in uterus and heart, Na⁺ CP type VII α may function in the regulation of salt intake behavior and central sensing of body-fluid sodium levels.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SCN7A (human) mapping to 2q24.3; Scn7a (mouse) mapping to 2 C1.3.

STORAGE

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

SOURCE

Na⁺ CP type VII α (C-19) is a purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Na⁺ CP type VII α of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Na⁺ CP type VII α (C-19) is recommended for detection of Na⁺ CP type VII α 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Na⁺ CP type VII α siRNA (h): sc-94349, Na⁺ CP type VII α siRNA (m): sc-149785, Na⁺ CP type VII α shRNA Plasmid (h): sc-94349-SH, Na⁺ CP type VII α shRNA Plasmid (m): sc-149785-SH, Na⁺ CP type VII α shRNA (h) Lentiviral Particles: sc-94349-V and Na⁺ CP type VII α shRNA (m) Lentiviral Particles: sc-149785-V.

Molecular Weight of Na⁺ CP type VII α : 193 kDa.

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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

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.