



Na⁺ CP type XI α (N-12): sc-103060

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 depolarizes the cell. Na⁺ CP type XI α , also known as SCN11A (sodium channel, voltage-gated, type XI, α subunit), hNaN, peripheral nerve sodium channel 5 or sensory neuron sodium channel 2, is a 1,791 amino acid multi-pass membrane protein that belongs to the voltage-gated sodium channel family. Expressed in spinal chord, cerebellar cortex, spleen, small intestine, olfactory bulb, hippocampus and dorsal and trigeminal root ganglia, Na⁺ CP type XI α functions to mediate the voltage-dependent sodium ion permeability of excitable membranes, specifically assuming an opened or closed conformation in response to voltage changes across the membrane. Na⁺ CP type XI α is expressed as three isoforms produced by alternative splicing.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SCN11A (human) mapping to 3p24; Scn11a (mouse) mapping to 9 F4.

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

Na⁺ CP type XI α (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Na⁺ CP type XI α of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103060 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Na⁺ CP type XI α (N-12) is recommended for detection of Na⁺ CP type XI 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Na⁺ CP type family members.

Suitable for use as control antibody for Na⁺ CP type XI α siRNA (h): sc-78209, Na⁺ CP type XI α siRNA (m): sc-149788, Na⁺ CP type XI α shRNA Plasmid (h): sc-78209-SH, Na⁺ CP type XI α shRNA Plasmid (m): sc-149788-SH, Na⁺ CP type XI α shRNA (h) Lentiviral Particles: sc-78209-V and Na⁺ CP type XI α shRNA (m) Lentiviral Particles: sc-149788-V.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.