SANTA CRUZ BIOTECHNOLOGY, INC.

Neurokinin B (H-51): sc-292436

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The tachykinin family consists of amidated neuropeptides that share a carboxy-terminal sequence (Phe-X-Gly-Leu-Met-NH_2). Tachykinin peptides have many plieotropic functions including: neurotransmission, immune/hematopoietic modulation, angiogenesis and mitogenesis. Neurokinin B (NKB), also known as TAC3 (tachykinin 3), NKNB or ZNEUROK1, is a 121 amino acid secreted protein that belongs to the tachykinin family and exists as 3 alternatively spliced isoforms. Expressed primarily in the central and peripheral nervous system, Neurokinin B is also found in the placental outer syncytiotrophoblast and is thought to have a role in pregnancy-induced pre-eclampsia and hypertension. The gene encoding Neurokinin B maps to human chromosome 12, which comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p.

REFERENCES

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3. Singh, D., et al. 2000. Increased expression of preprotachykinin-I and neurokinin receptors in human breast cancer cells: implications for bone marrow metastasis. Proc. Natl. Acad. Sci. USA 97: 388-393.
4. Delgado Carrasco, J., et al. 2001. Achondrogenesis type II-hypochondrogenesis: radiological features. Case report. An. Esp. Pediatr. 55: 553-557.
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6. Forzano, F., et al. 2007. A familial case of achondrogenesis type II caused by a dominant COL2A1 mutation and "patchy" expression in the mosaic father. Am. J. Med. Genet. A 143A: 2815-2820.
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CHROMOSOMAL LOCATION

Genetic locus: TAC3 (human) mapping to 12q13.3; Tac2 (mouse) mapping to 10 D3.

SOURCE

Neurokinin B (H-51) is a rabbit polyclonal antibody raised against amino acids 71-121 mapping at the C-terminus of Neurokinin B 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Neurokinin B (H-51) is recommended for detection of Neurokinin B of mouse, rat and human 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)], 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 Neurokinin B siRNA (h): sc-106300, Neurokinin B siRNA (m): sc-42291, Neurokinin B shRNA Plasmid (h): sc-106300-SH, Neurokinin B shRNA Plasmid (m): sc-42291-SH, Neurokinin B shRNA (h) Lentiviral Particles: sc-106300-V and Neurokinin B shRNA (m) Lentiviral Particles: sc-42291-V.

Molecular Weight of Neurokinin B isoforms: 13/15/11 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

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.