SANTA CRUZ BIOTECHNOLOGY, INC.

Neurokinin B (1B2): sc-517127

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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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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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8. Benussi, D.G., et al. 2009. Trisomy 12p and monosomy 4p: phenotype-genotype correlation. Genet. Test. Mol. Biomarkers 13: 199-204.
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CHROMOSOMAL LOCATION

Genetic locus: TAC3 (human) mapping to 12q13.3.

SOURCE

Neurokinin B (1B2) is a mouse monoclonal antibody raised against amino acids 17-121 representing full length Neurokinin B of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Neurokinin B (1B2) is recommended for detection of Neurokinin B of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

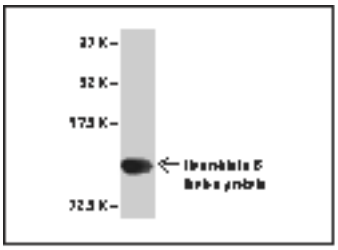
Suitable for use as control antibody for Neurokinin B siRNA (h): sc-106300, Neurokinin B shRNA Plasmid (h): sc-106300-SH and Neurokinin B shRNA (h) Lentiviral Particles: sc-106300-V.

Molecular Weight of Neurokinin B isoforms: 13/15/11 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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



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 for detailed protocols and support products.