SANTA CRUZ BIOTECHNOLOGY, INC.

Wnt-8b (L-14): sc-25178

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Wnt genes belong to a family of protooncogenes with at least 13 known members that are expressed in species ranging from *Drosophila* to man. The name Wnt denotes the relationship of this family to the *Drosophila* segment polarity gene "wingless" and to its vertebrate ortholog, Int-1, a mouse protooncogene. Transcription of Wnt family genes appears to be developmentally regulated in a precise temporal and spatial manner. The Wnt genes encode cysteine-rich putative glycoproteins, which have features typical of secreted growth factors. Wnt-8b was named on the basis of the very high sequence similarity (approximately 90% identity) of the inferred protein to those encoded by the *Xenopus* and zebrafish Wnt-8b genes. The human and mouse expression patterns appear to be identical and are restricted to the developing brain, with the great majority of expression being found in the developing forebrain. Expression in the developing hippocampus may suggest a role for Wnt-8b in patterning of this region. The gene which encodes Wnt-8b maps to human chromosome 10q24.31.

REFERENCES

1. Gavin, B.J., et al. 1990. Expression of multiple novel Wnt-1/Int-1-related genes during fetal and adult mouse development. Genes Dev. 4: 2319-2332.
2. Lako, M., et al. 1996. Isolation and characterization of Wnt-8b, a novel human Wnt gene that maps to 10q24. Genomics 35: 386-388.
3. Lako, M., et al. 1998. A novel mammalian Wnt gene, Wnt-8b, shows brain-restricted expression in early development, with sharply delimited expression boundaries in the developing forebrain. Hum. Mol. Genet. 7: 813-822.
4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 601396. World Wide Web URL: http://www.ncbi.nlm.nih.gov

CHROMOSOMAL LOCATION

Genetic locus: WNT8B (human) mapping to 10q24.31; Wnt8b (mouse) mapping to 19 C3.

SOURCE

Wnt-8b (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Wnt-8b 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.

Blocking peptide available for competition studies, sc-25178 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Wnt-8b (L-14) is recommended for detection of Wnt-8b 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).

Wnt-8b (L-14) is also recommended for detection of Wnt-8b in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Wnt-8b siRNA (h): sc-41118, Wnt-8b siRNA (m): sc-41119, Wnt-8b shRNA Plasmid (h): sc-41118-SH, Wnt-8b shRNA Plasmid (m): sc-41119-SH, Wnt-8b shRNA (h) Lentiviral Particles: sc-41118-V and Wnt-8b shRNA (m) Lentiviral Particles: sc-41119-V.

Molecular Weight of Wnt-8b: 39 kDa.

Positive Controls: Rat brain extract: sc-2392.

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.

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.