

Wnt-10a (N-14): sc-69135

BACKGROUND

The Wnt family of protooncogenes consists of at least 13 known members which encode secreted signaling proteins that are involved in oncogenesis and several other developmental processes, such as regulation of cell fate and embryogenesis. Wnt-10a (wingless-type MMTV integration site family, member 10A) is a 417 amino acid protein that is secreted into the extracellular matrix and belongs to the Wnt family. Strongly expressed in promyelocytic leukemia and Burkitt's lymphoma, Wnt-10a functions as a ligand for frizzled proteins and is thought to be involved in development of the central nervous system, probably acting as a signaling molecule. Overexpression of Wnt-10a is associated with the pathogenesis of various carcinomas, strongly suggesting a role for Wnt-10a in tumor development and metastasis. Defects in the gene encoding Wnt-10a are the cause of odonto-oncho-dermal dysplasia (OODD), a rare autosomal recessive disorder that is characterized by dry hair, onychodysplasia and hyperkeratosis of the skin.

REFERENCES

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3. Katoh, Y. and Katoh, M. 2005. Identification and characterization of rat Wnt6 and Wnt10a genes in silico. *Int. J. Mol. Med.* 15: 527-531.
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5. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 606268. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: WNT10A (human) mapping to 2q35; Wnt10a (mouse) mapping to 1 C3.

SOURCE

Wnt-10a (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Wnt-10a 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-69135 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Wnt-10a (N-14) is recommended for detection of Wnt-10a 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-10a (N-14) is also recommended for detection of Wnt-10a in additional species, including canine.

Suitable for use as control antibody for Wnt-10a siRNA (h): sc-76927, Wnt-10a siRNA (m): sc-76928, Wnt-10a shRNA Plasmid (h): sc-76927-SH, Wnt-10a shRNA Plasmid (m): sc-76928-SH, Wnt-10a shRNA (h) Lentiviral Particles: sc-76927-V and Wnt-10a shRNA (m) Lentiviral Particles: sc-76928-V.

Molecular Weight of Wnt-10a: 46 kDa.

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.

SELECT PRODUCT CITATIONS

1. Kasaai, B., Moffatt, P., Al-Salmi, L., Lauzier, D., Lessard, L. and Hamdy, R.C. 2012. Spatial and temporal localization of WNT signaling proteins in a mouse model of distraction osteogenesis. *J. Histochem. Cytochem.* 60: 219-228.

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.



Try **Wnt-10a (A-4): sc-376028** or **Wnt-10a (C-9): sc-376029**, our highly recommended monoclonal alternatives to Wnt-10a (N-14).