

WISP-2 (H-74): sc-25442

BACKGROUND

Wnt-induced secreted protein (WISP)-1, WISP-2 and WISP-3 are members of the CCN family of growth factors, which include connective tissue growth factor (CTGF) and Cyr61. WISP-1, WISP-2 and WISP-3 share significant sequence similarity, including four conserved cysteine-rich domains, and they are believed to function as dimers in their active forms. WISP-1 expression is observed in various tissues including adult heart, kidney and spleen, while WISP-2 expression predominates in skeletal muscle, colon and ovary. Both WISP-1 and WISP-2 are upregulated in cells transformed with the proto-oncogene Wnt-1, and they are also more highly expressed in human colon tumors, suggesting that these proteins may participate in tumor development. WISP-3 is involved in normal post-natal skeletal growth, and it is also implicated in the development of the autosomal recessive skeletal disorder progressive pseudorheumatoid dysplasia, which affects cartilage homeostasis by disrupting the growth of chondrocyte and normal cell columnar organization.

REFERENCES

1. Shimizu, H., et al. 1997. Transformation by Wnt family proteins correlates with regulation of β -catenin. *Cell Growth Differ.* 8: 1349-1358.
2. el-Shanti, H.E., et al. 1997. Progressive pseudorheumatoid dysplasia: report of a family and review. *J. Med. Genet.* 34: 559-563.

CHROMOSOMAL LOCATION

Genetic locus: WISP2 (human) mapping to 20q13.12; Wisp2 (mouse) mapping to 2 H3.

SOURCE

WISP-2 (H-74) is a rabbit polyclonal antibody raised against amino acids 57-130 of WISP-2 of human origin.

PRODUCT

Each vial contains 200 μ g 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

WISP-2 (H-74) is recommended for detection of WISP-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

WISP-2 (H-74) is also recommended for detection of WISP-2 in additional species, including bovine and porcine.

Suitable for use as control antibody for WISP-2 siRNA (h): sc-39337, WISP-2 siRNA (m): sc-39338, WISP-2 shRNA Plasmid (h): sc-39337-SH, WISP-2 shRNA Plasmid (m): sc-39338-SH, WISP-2 shRNA (h) Lentiviral Particles: sc-39337-V and WISP-2 shRNA (m) Lentiviral Particles: sc-39338-V.

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.

SELECT PRODUCT CITATIONS

1. Kawaki, H., et al. 2008. Cooperative regulation of chondrocyte differentiation by CCN2 and CCN3 shown by a comprehensive analysis of the CCN family proteins in cartilage. *J. Bone Miner. Res.* 23: 1751-1764.
2. Sabbah, M., et al. 2011. CCN5, a novel transcriptional repressor of the transforming growth factor β signaling pathway. *Mol. Cell. Biol.* 31: 1459-1469.
3. Kawaki, H., et al. 2011. Differential roles of CCN family proteins during osteoblast differentiation: Involvement of Smad and MAPK signaling pathways. *Bone* 49: 975-989.
4. Erovic, B.M., et al. 2012. Prognostic and predictive markers in medullary thyroid carcinoma. *Endocr. Pathol.* 23: 232-242.
5. Erovic, B.M., et al. 2013. Identification of novel target proteins in sebaceous gland carcinoma. *Head Neck* 35: 642-648.
6. Wang, Q., et al. 2013. BRCA2 dysfunction promotes malignant transformation of pancreatic intraepithelial neoplasia. *Anticancer Agents Med. Chem.* 13: 261-269.

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.



Try **WISP-2 (B-5): sc-514070**, our highly recommended monoclonal alternative to WISP-2 (H-74).