SANTA CRUZ BIOTECHNOLOGY, INC.

WISP-2 (L-20): sc-12010

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.
3. Pennica, D., et al. 1998. WISP genes are members of the connective tissue growth factor family that are upregulated in Wnt-1-transformed cells and aberrantly expressed in human colon tumors. Proc. Natl. Acad. Sci. USA 95: 14717-14722.
4. Hurvitz, J.R., et al. 1999. Mutations in the CCN gene family member WISP-3 cause progressive pseudorheumatoid dysplasia. Nat. Genet. 23: 94-98.
5. Babic, A.M., et al. 1999. Fisp12/mouse connective tissue growth factor mediates endothelial cell adhesion and migration through integrin αvβ3, promotes endothelial cell survival, and induces angiogenesis *in vivo*. Mol. Cell Biol. 19: 2958-2966.

CHROMOSOMAL LOCATION

Genetic locus: Wisp2 (mouse) mapping to 2 H3.

SOURCE

WISP-2 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WISP-2 of mouse 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-12010 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

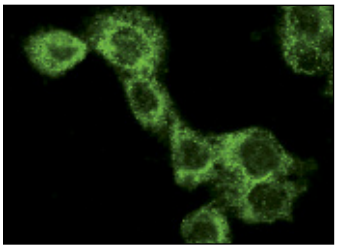
WISP-2 (L-20) is recommended for detection of WISP-2 of mouse origin and COP-1 of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Positive Controls: L8 cell lysate: sc-3807.

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.

DATA



WISP-2 (L-20): sc-12010. Immunofluorescence staining of methanol-fixed L8 cells showing cytoplasmic localization.

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.