

WISP-2 (h2): 293T Lysate: sc-116953

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 up-regulated 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 WISP3 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 $\alpha_v\beta_3$, promotes endothelial cell survival, and induces angiogenesis *in vivo*. *Mol. Cell. Biol.* 19: 2958-2966.

CHROMOSOMAL LOCATION

Genetic locus: WISP2 (human) mapping to 20q13.12.

PRODUCT

WISP-2 (h2): 293T Lysate represents a lysate of human WISP-2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

WISP-2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive WISP-2 antibodies. Recommended use: 10-20 μ l per lane.

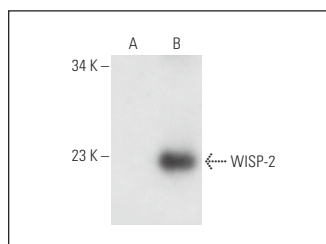
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

WISP-2 (B-5): sc-514070 is recommended as a positive control antibody for Western Blot analysis of enhanced human WISP-2 expression in WISP-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



WISP-2 (B-5): sc-514070. Western blot analysis of WISP-2 expression in non-transfected: sc-117752 (A) and human WISP-2 transfected: sc-116953 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.