



WIF-1 (m2): 293T Lysate: sc-124645

BACKGROUND

The Wnt genes are a group of conserved, cysteine-rich, secreted glycoproteins that are required for numerous developmental processes including embryogenesis, asymmetric cell division and central nervous system (CNS) patterning. Wnt association with the transmembrane spanning receptor frizzled activates dishevelled, which downregulates glycogen synthase kinase (GSK) through serine phosphorylation. Reduced levels of active GSK cause accumulation of β -catenin and subsequent regulation of developmentally significant Wnt target genes. Wnt antagonists such as Dickkopf (Dkk), frizzled-related protein (sFRP) and Wnt inhibitory factor-1 (WIF-1) are necessary to ensure normal spatial and temporal patterns of Wnt activity during developmental processes. Wnt inhibitory factor-1 (WIF-1) is a 379-amino acid, secreted protein that contains an N-terminal signal sequence, a 150-amino acid WIF domain, 5 epidermal growth factor-like repeats and a 45-amino acid C-terminal hydrophilic domain.

REFERENCES

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2. Cadigan, K.M., et al. 1997. Wnt signaling: a common theme in animal development. *Genes Dev.* 11: 3286-3305.
3. Sakanaka, C., et al. 1998. Bridging of β -catenin and glycogen synthase kinase-3 β by Axin and inhibition of β -catenin-mediated transcription. *Proc. Natl. Acad. Sci. USA* 95: 3020-3023.
4. Glinka, A., et al. 1998. Dickkopf-1 is a member of a new family of secreted proteins and functions in head induction. *Nature* 391: 357-362.
5. Hsieh, J.C., et al. 1999. A new secreted protein that binds to Wnt proteins and inhibits their activities. *Nature* 398: 431-436.
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CHROMOSOMAL LOCATION

Genetic locus: Wif1 (mouse) mapping to 10 D2.

PRODUCT

WIF-1 (m2): 293T Lysate represents a lysate of mouse WIF-1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

WIF-1 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive WIF-1 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.

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 or our catalog for detailed protocols and support products.