

Desmin (m): 293T Lysate: sc-119754

BACKGROUND

Cytoskeletal intermediate filaments (IFs) constitute a diverse group of proteins that are expressed in a highly tissue-specific manner. IFs are constructed from two-chain α -helical coiled-coil molecules arranged on an imperfect helical lattice, and have been widely used as markers for distinguishing individual cell types within a tissue and identifying the origins of metastatic tumors. Vimentin is an IF general marker of cells originating in the mesenchyme. Vimentin and Desmin, a related class III IF, are both expressed during skeletal muscle development. Desmin, a 469 amino acid protein found near the Z line in sarcomeres, is expressed more frequently in adult differentiated state tissues. Desmin makes up attachments between the terminal Z-disc and membrane-associated proteins to form a force-transmitting system. Mutations in the gene encoding for Desmin are associated with adult-onset skeletal myopathy, sporadic disease and mild cardiac involvement.

REFERENCES

- Li, Z.L., et al. 1989. Human Desmin-coding gene: complete nucleotide sequence, characterization and regulation of expression during myogenesis and development. *Gene* 78: 243-254.
- Tidball, J.G., et al. 1992. Desmin at myotendinous junctions. *Exp. Cell Res.* 199: 206-212.
- Stewart, M. 1993. Intermediate filament structure and assembly. *Curr. Opin. Cell Biol.* 5: 3-11.
- Gereben, B., et al. 1995. Species-specificity of glial Vimentin as revealed by immunocytochemical studies with the Vim 3B4 and V9 monoclonal antibodies. *Neurobiology* 3: 151-164.
- Andreoli, J.M., et al. 1995. Structural and biological consequences of increased Vimentin expression in simple epithelial cell types. *Cell Motil. Cytoskeleton* 32: 10-25.
- Seshadri, R., et al. 1996. Vimentin expression is not associated with poor prognosis in breast cancer. *Int. J. Cancer* 67: 353-356.
- Essa, T.M., et al. 1996. Vimentin expression in different types of breast carcinoma immunohistochemical study. *J. Egypt. Soc. Parasitol.* 26: 433-442.
- Chu, Y.W., et al. 1996. Experimental coexpression of Vimentin and keratin intermediate filaments in human melanoma cells augments motility. *Am. J. Pathol.* 148: 63-69.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 125660. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: Des (mouse) mapping to 1 C4.

PRODUCT

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

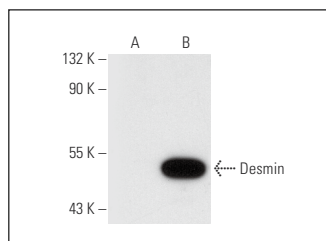
APPLICATIONS

Desmin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Desmin antibodies. Recommended use: 10-20 μ l per lane.

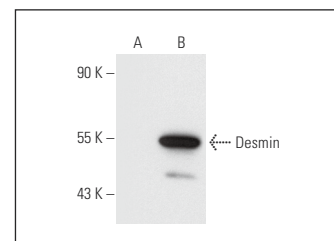
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Desmin (D33): sc-58744 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Desmin expression in Desmin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



Desmin (D33): sc-58744. Western blot analysis of Desmin expression in non-transfected: sc-117752 (A) and mouse Desmin transfected: sc-119754 (B) 293T whole cell lysates.



Desmin (RD301): sc-23879. Western blot analysis of Desmin expression in non-transfected: sc-117752 (A) and mouse Desmin transfected: sc-119754 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.