Desmin (h2): 293T Lysate: sc-170763



The Power to Question

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

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- Andreoli, J.M. and Trevor, K.T. 1995. Structural and biological consequences of increased Vimentin expression in simple epithelial cell types. Cell Motil. Cytoskeleton 32: 10-25.
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- 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.

CHROMOSOMAL LOCATION

Genetic locus: DES (human) mapping to 2q35.

PRODUCT

Desmin (h2): 293T Lysate represents a lysate of human Desmin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

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

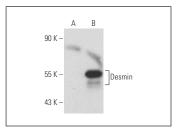
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Desmin (10H7D2): sc-65983 is recommended as a positive control antibody for Western Blot analysis of enhanced human Desmin expression in Desmin 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-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Desmin (10H7D2): sc-65983. Western blot analysis of Desmin expression in non-transfected: sc-117752 (A) and human Desmin transfected: sc-170763 (B) 293T whole cell lysates.

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.

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