Technical Data Sheet

Purified Mouse Anti-Desmin

Product Information

Material Number: 550626 Size: 50 μg 0.5 mg/mlConcentration: RD301 Clone:

Purified desmin from chicken gizzard Immunogen:

Isotype: Mouse IgG2b Reactivity: QC Testing: Mouse

Tested in Development: Rat, Human, Chicken

Target MW:

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Intermediate filaments (IF) are a subset of cytoskeletal proteins which function to give overall structural integrity to the plasma membrane as well as organize cells into specific tissues. IF proteins can be divided into six major types based upon the similarity in sequence. Desmin belongs to the type III category of IF proteins which are predominantly expressed in muscle cells including cardiac, skeletal and smooth muscle. Furthermore, the expression of desmin is regulated in a stage and tissue-specific manner, since it is induced during terminal differentiation of skeletal muscle cells. In skeletal cardiac muscle cells, desmin is localized in the Z-disk region and at the intercalated disk and acts to stabilize sarcomeres in stimulated muscle. Desmin migrates in SDS/PAGE as a 53 kDa protein.



Western blot analysis of desmin. Mouse muscle lysate was probed with anti-desmin (clone RD301, Cat. No 550626) at concentrations 0.25 (lane 1), 0.125 (lane 2), and 0.06 μ g/ml (lane 3). Desmin is identified as a band of ~53

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4°C.

Application Notes

Application

-	Аррисация	
	Western blot	Routinely Tested
	Immunofluorescence	Tested During Development

Recommended Assay Procedure:

Applications include western blot analysis and immunofluorescence microscopy on frozen sections although IF is not tested at BD Pharmingen. Mouse muscle lysate is recommended as a positive control.

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

BD Biosciences

bdbiosciences.com

United States Canada Asia Pacific Latin America/Caribbean Europe Japan 877.232.8995 888.259.0187 32.53.720.550 0120.8555.90 65.6861.0633

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



550626 Rev. 2

References

Broers JL, Carney DN, Klein Rot M, et al. Intermediate filament proteins in classic and variant types of small cell lung carcinoma cell lines: a biochemical and immunochemical analysis using a panel of monoclonal and polyclonal antibodies. *J Cell Sci.* 1986; 83:37-60.(Immunogen) Lodish H, Berk A, Zipursky SL, et al. *Molecular Cell Biology*. New York: WH Freeman; 2000:795-847.(Biology)

Pieper FR, Schaart G, Krimpenfort PJ, et al. Transgenic expression of the muscle-specific intermediate filament protein desmin in nonmuscle cells. J Cell Biol. 1989; 108(3):1009-1024.(Clone-specific: Fluorescence microscopy, Western blot)

Raats JM, Pieper FR, Vree Egberts WT, Verrijp KN, Ramaekers FC, Bloemendal H. Assembly of amino-terminally deleted desmin in vimentin-free cells. J Cell Biol. 1990; 111(5):1971-1985. (Clone-specific: Fluorescence microscopy, Western blot)
Schaart G, Viebahn C, Langmann W, Ramaekers F. Desmin and titin expression in early postimplantation mouse embryos. *Development*. 1989; 107(3):585-596.

(Clone-specific: Fluorescence microscopy, Western blot)

550626 Rev. 2 Page 2 of 2