Desmin (RD301): sc-23879

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 IIIIF, 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 Desmin are associated with adult-onset skeletal myopathy, sporadic disease and mild cardiac involvement.

CHROMOSOMAL LOCATION
Genetic locus: DES (human) mapping to 2q35; Des (mouse) mapping to 1C4.

SOURCE
Desmin (RD301) is a mouse monoclonal antibody raised against cytoskeletal desmin extract from gizzard of chicken origin.

PRODUCT
Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Desmin (RD301) is available conjugated to agarose (sc-23879 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23879 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-23879 PE), fluorescein (sc-23878 FITC), Alexa Fluor® 488 (sc-23879 AF488) or Alexa Fluor® 647 (sc-23879 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS
Desmin (RD301) is recommended for detection of Desmin of mouse, rat, human, hamster, canine, porcine, rabbit and avian origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:200), immunoprecipitation [1:2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Desmin siRNA (h): sc-29294, Desmin siRNA (m): sc-29295, Desmin shRNA Plasmid (h): sc-29294-SH, Desmin shRNA Plasmid (m): sc-29295-SH, Desmin shRNA (h) Lentiviral Particles: sc-29294-V and Desmin shRNA (m) Lentiviral Particles: sc-29295-V.

Molecular Weight of Desmin: 53 kDa.

Positive Controls: Sol8 cell lysate: sc-2249, Desmin (m): 293T Lysate: sc-119754 or SJRH30 cell lysate: sc-2287.

STORAGE
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA

SELECT PRODUCT CITATIONS

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