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. Mutations in the gene encoding Desmin are associated with adult-onset skeletal myopathy, sporadic Desmin, a related class IIIIF, are both expressed during skeletal muscle development 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/ml for WB, IHC and ELISA; to either phycocerythrin (sc-23879 PE), fluorescein (sc-23879 FITC), Alexa Fluor® 488 (sc-23879 AF488), Alexa Fluor® 546 (sc-23879 AF546), Alexa Fluor® 594 (sc-23879 AF594) or Alexa Fluor® 647 (sc-23879 AF647), 200 µg/ml, for WB (RGB), IHC (P) and FCM; and to either Alexa Fluor® 680 (sc-23879 AF680) or Alexa Fluor® 790 (sc-23879 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF 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.