

Polyclonal Anti-Desmin Picoband™ Antibody

Catalog Number: PB9105

Description

Gene Name	desmin
Recommended Protein Name	Desmin
Lot No.	0911412Da500595
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human, mouse, rat
Immunogen	E.coli-derived human Desmin recombinant protein (Position: M1-T304). Human Desmin shares 97% amino acid (aa) sequence identity with both mouse and rat Desmin.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu, Ms, Rat	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1µg/ml	Hu, Ms, Rat	By Heat
Immunohistochemistry (Frozen Section)	0.5-1µg/ml	Ms, Rat	-

WB: The detection limit for Desmin is approximately 0.25ng/lane under reducing conditions.

Tested Species: In-house tested species with positive results.

By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P) and IHC(F).

Background

DES, also called desmin, is a protein that in humans is encoded by the DES gene, and this gene is mapped to 2q35. DES is the muscle-specific member of the intermediate filament (IF) protein family. It is one of the earliest myogenic markers, both in heart and somites, and is expressed in satellite stem cells and replicating myoblasts. DES is very important in muscle cell architecture and structure since it connects many components of the cytoplasm. It may be also play an important role in mitochondria function. What's more, DES provides attachments between the terminal Z disc and membrane-associated proteins to form a force-transmitting system that parallels the thin filaments at myotendinous junctions.

Reference

1. Muñoz-Mármol AM, Strasser G, Isamat M, Coulombe PA, Yang Y, Roca X, Vela E, Mate JL, Coll J, Fernández-Figueras MT, Navas-Palacios JJ, Ariza A, Fuchs E (September 1998). "A dysfunctional desmin mutation in a patient with severe generalized myopathy". Proc. Natl. Acad. Sci. U.S.A. 95 (19): 11312–7.
2. Li ZL, Lilienbaum A, Butler-Browne G, Paulin D (May 1989). "Human desmin-coding gene: complete nucleotide sequence, characterization and regulation of expression during myogenesis and development". Gene 78 (2): 243–54.
3. Tidball, J. G. Desmin at myotendinous junctions. Exp. Cell Res. 199: 206-212, 1992.