

## Anti-Desmin Antibody (Monoclonal, DE-U-10)

Catalog Number: MA1036

### About Des

Desmin belongs to the type III family of intermediate filaments, a class of cytoskeletal elements. DES gene encodes desmin, a muscle-specific cytoskeletal protein found in smooth, cardiac, and heart muscles. Tidball (1992) found that desmin was codistributed with actin thin filaments within the cellular processes of myotendinous junctions in frog skeletal muscle. DES gene contains 9 exons and spans about 8.4 kb. By in situ hybridization, Viegas-Pequignot et al. (1989) localized the gene to 2q35. Desmin mutation responsible for idiopathic dilated cardiomyopathy.

### Overview

Product Name	Anti-Desmin Antibody (Monoclonal, DE-U-10)
Reactive Species	Human, Mouse, Rabbit, Rat
Description	Boster Bio Anti-Desmin Antibody (Monoclonal, DE-U-10) catalog # MA1036. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rabbit, Rat.
Application	IHC, WB
Clonality	Monoclonal DE-U-10
Formulation	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN <sub>3</sub> as preservative.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P48675

### Technical Details

Immunogen	Desmin from pig stomach.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 1 ml of PBS buffer will yield a concentration of 100 ug/ml.
Purification	Ascites
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this

kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Immunohistochemistry (Paraffin-embedded Section), 2-4ug/ml, Human, mouse, rat, rabbit, By Heat  
Western blot, 2ug/ml, Human, mouse, rat, rabbit

## Anti-Desmin Antibody (Monoclonal, DE-U-10) (MA1036) Images

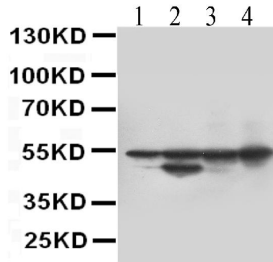


Figure 1. Western blot analysis of Desmin using anti-Desmin antibody (MA1036).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50 ug of sample under reducing conditions.

Lane 1: Rat Skeletal Muscle Tissue Lysate,  
Lane 2: Rat Cardiac Muscle Tissue Lysate,  
Lane 3: Mouse Skeletal Muscle Tissue Lysate,  
Lane 4: Mouse Cardiac Muscle Tissue Lysate.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Desmin antigen affinity purified monoclonal antibody (Catalog # MA1036) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Desmin at approximately 53 kDa. The expected band size for Desmin is at 53 kDa.

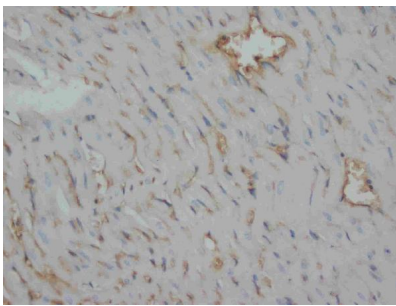


Figure 2. IHC analysis of Desmin using anti-Desmin antibody (MA1036).

Desmin was detected in a paraffin-embedded section of Rat Cardiac Muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Desmin Antibody (MA1036) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

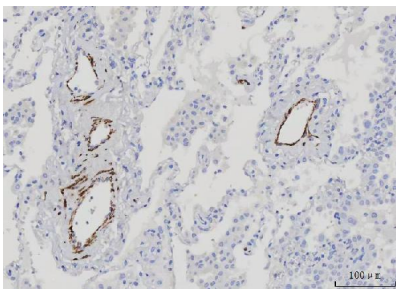


Figure 3. IHC analysis of Desmin using anti-Desmin antibody (MA1036).

Desmin was detected in a paraffin-embedded section of human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Desmin Antibody (MA1036) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

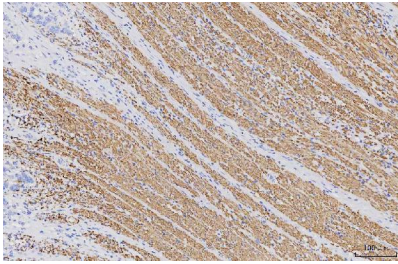


Figure 4. IHC analysis of Desmin using anti-Desmin antibody (MA1036).

Desmin was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Desmin Antibody (MA1036) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

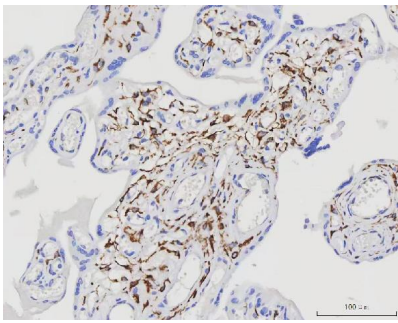


Figure 5. IHC analysis of Desmin using anti-Desmin antibody (MA1036).

Desmin was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Desmin Antibody (MA1036) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

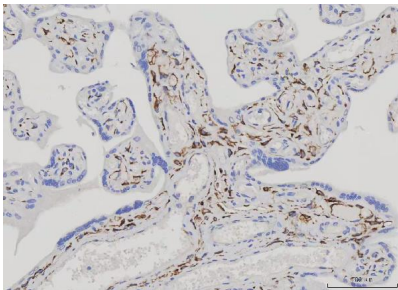


Figure 6. IHC analysis of Desmin using anti-Desmin antibody (MA1036).

Desmin was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Desmin Antibody (MA1036) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

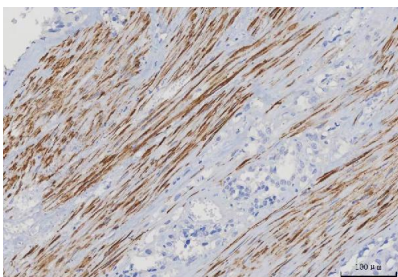


Figure 7. IHC analysis of Desmin using anti-Desmin antibody (MA1036).

Desmin was detected in a paraffin-embedded section of human invasive urothelial carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Desmin Antibody (MA1036) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

## 21 Publications Citing This Product

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1. PubMed ID: 25174394, Wei L, Yang J, Wang M, Xu Sn, Liang Hm, Zhou Q. Int J Mol Med. 2014 Nov;34(5):1257-67. Doi: 10.3892/Ijmm.2014.1905. Epub 2014 Aug 19. Sodium Ferulate Lowers Portal Pressure In Rats With Secondary Biliary Cirrhosis Through The Rhoa/Rho-Kinase Signa...
2. PubMed ID: 26286600, Identification of apoptosis-related microRNAs and their target genes in myocardial infarction post-transplantation with skeletal myoblasts
3. PubMed ID: 22053192, Longxi P, Buwu F, Yuan W, Sinan G. Plos One. 2011;6(10):E26500. Doi: 10.1371/Journal.Pone.0026500. Epub 2011 Oct 28. Expression Of P53 In The Effects Of Artesunate On Induction Of Apoptosis And Inhibition Of Proliferation In Rat Primary Hepatic St...

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