

Datasheet for 200-301-P35**Desmin Antibody****Overview**

Description:	Anti-Desmin (MOUSE) Antibody - 200-301-P35
Item No.:	200-301-P35
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat, Rabbit
Host Species:	Mouse

Product Details

Background:	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. This antibody is suitable for researchers interested in cancer research, cardiovascular diseases, neurodegenerative diseases, cell adhesion research, and cytoskeletal signaling research.
Synonyms:	CMD1I, CSM1, CSM2, intermediate filament protein
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	DE-U-10
Format:	IgG1

Target Details

Gene Name:	DES
Reactivity:	Human, Mouse, Rat, Rabbit
Immunogen Type:	Other

Immunogen:	Desmin antibody was produced in mice by repeated immunizations with desmin from pig stomach.
Purity/Specificity:	Anti-Desmin antibody was purified from mouse ascites by protein A chromatography. This product reacts with human, mouse, rat, and rabbit. Cross reactivity with Desmin from other sources has not been determined.
Relevant Links:	• UniProtKB - P02540 • GeneID - 396725 • NCBI - NP_001001535.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Desmin is tested for Immunohistochemistry-P and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~53.5 kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000
IHC:	1:100-1:500
WB:	2ug/ml

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	1.2% sodium acetate
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	2mg BSA
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Neutral PBS

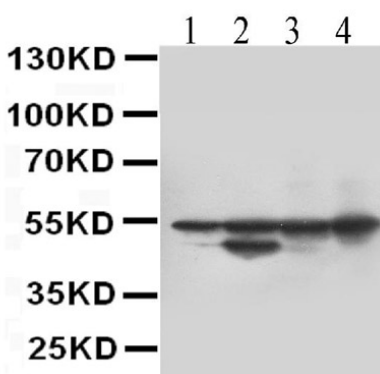
Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition: Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



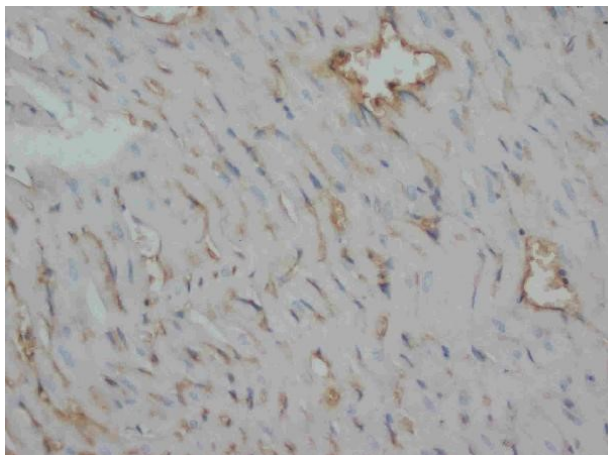
Western Blot

Western blot analysis of Desmin using anti-Desmin antibody.

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 µg 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.

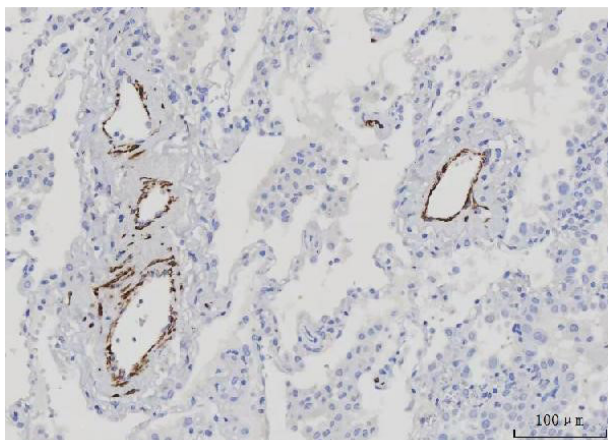
The membrane was incubated with affinity purified mouse anti-Desmin antigen monoclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at 1:10,000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit 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.



Immunohistochemistry

Immunohistochemistry analysis of Desmin using anti-Desmin antibody.

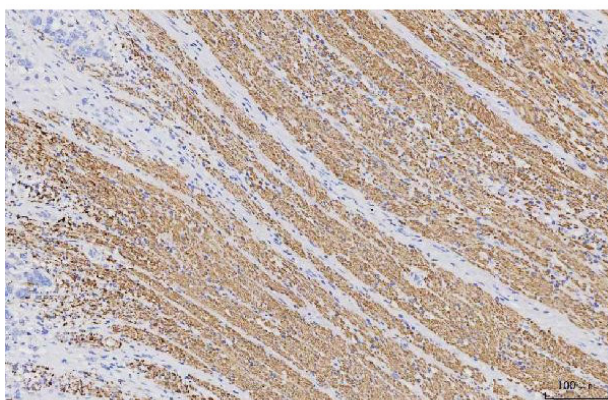
Desmin was detected in a paraffin-embedded section of Rat Cardiac Muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Desmin Antibody 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 with DAB as the chromogen.



Immunohistochemistry

Immunohistochemistry analysis of Desmin using anti-Desmin antibody.

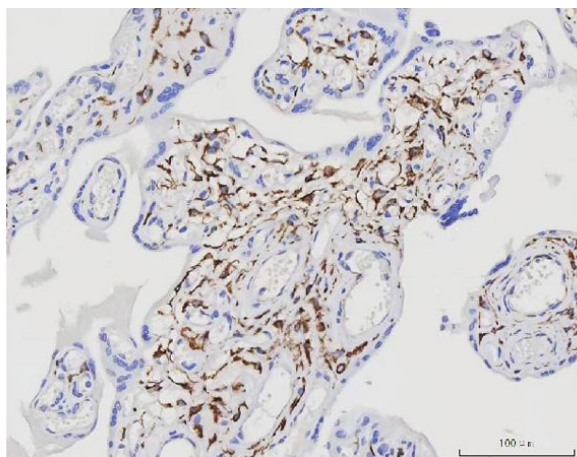
Desmin was detected in a paraffin-embedded section of human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Desmin Antibody 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 with DAB as the chromogen.



Immunohistochemistry

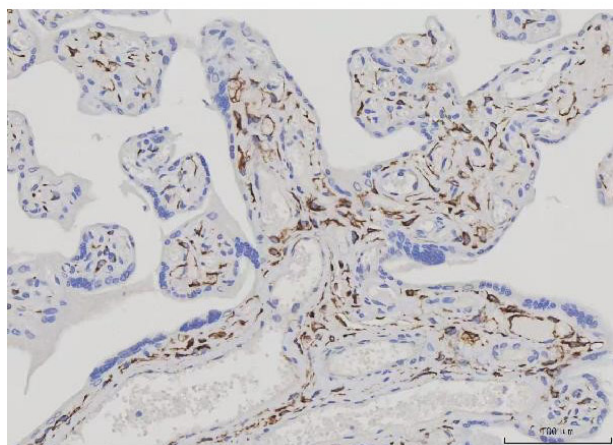
Immunohistochemistry analysis of Desmin using anti-Desmin antibody.

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 µg/ml mouse anti-Desmin Antibody 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 with DAB as the chromogen.

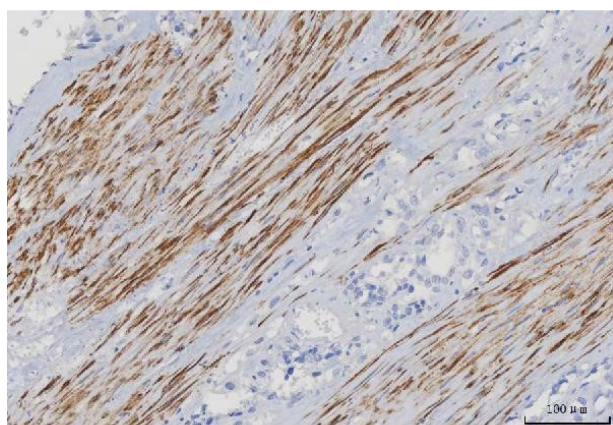
**Immunohistochemistry**

Immunohistochemistry analysis of Desmin using anti-Desmin antibody.

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 μ g/ml mouse anti-Desmin Antibody 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 with DAB as the chromogen.

**Immunohistochemistry**

Immunohistochemistry analysis of Desmin using anti-Desmin antibody. 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 μ g/ml mouse anti-Desmin Antibody 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 with DAB as the chromogen.

**Immunohistochemistry**

Immunohistochemistry analysis of Desmin using anti-Desmin antibody. 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 μ g/ml mouse anti-Desmin Antibody 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 with DAB as the chromogen.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.