abcam

Product datasheet

Anti-Desmin antibody [Y66] - BSA and Azide free ab271829



2 References 10 Images

Overview

Product name Anti-Desmin antibody [Y66] - BSA and Azide free

Description Rabbit monoclonal [Y66] to Desmin - BSA and Azide free

Host species Rabbit

Tested applications

Suitable for: ICC/IF, WB, IHC-P, Flow Cyt (Intra)

Species reactivity

Reacts with: Mouse, Rat, Guinea pig, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Epitope ab32362 reacts with an epitope located in the C terminal region of desmin.

Positive control ICC/IF: A673 and C2C12 cells. IHC-P: Human skeletal muscle, uterus and urinary bladder tissues.

Flow Cyt (intra): C2C12.

General notes ab271829 is the carrier-free version of <u>ab32362</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our $\mathsf{RabMAb}^{\texttt{®}}$ technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.20

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number Y66
Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab271829 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 54 kDa.
IHC-P		Use at an assay dependent concentration. See IHC antigen retrieval protocols.
Flow Cyt (Intra)		Use at an assay dependent concentration. <u>ab172730</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

Target

Function Desmin are class-Ill intermediate filaments found in muscle cells. In adult striated muscle they form

a fibrous network connecting myofibrils to each other and to the plasma membrane from the

periphery of the Z-line structures.

Involvement in diseaseDefects in DES are the cause of myopathy myofibrillar desmin-related (MFM-DES)

[MIM:601419]; also known as desmin-related myopathy (DRM). A neuromuscular disorder characterized by skeletal muscle weakness associated with cardiac conduction blocks, arrhythmias, restrictive heart failure, and by myofibrillar destruction with intracytoplasmic

accumulation of desmin-reactive deposits in cardiac and skeletal muscle cells.

Defects in DES are the cause of cardiomyopathy dilated type 1I (CMD1I) [MIM:604765]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

Defects in DES are the cause of neurogenic scapuloperoneal syndrome Kaeser type (Kaeser syndrome) [MIM:181400]. Kaeser syndrome is an autosomal dominant disorder with a peculiar scapuloperoneal distribution of weakness and atrophy. A large clinical variability is observed ranging from scapuloperoneal, limb grindle and distal phenotypes with variable cardiac or respiratory involvement. Facial weakness, dysphagia and gynaecomastia are frequent additional symptoms. Affected men seemingly bear a higher risk of sudden, cardiac death as compared to affected women. Histological and immunohistochemical examination of muscle biopsy specimens reveal a wide spectrum of findings ranging from near normal or unspecific pathology to typical, myofibrillar changes with accumulation of desmin.

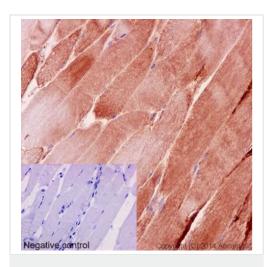
Sequence similarities

Cellular localization

Belongs to the intermediate filament family.

Cytoplasm.

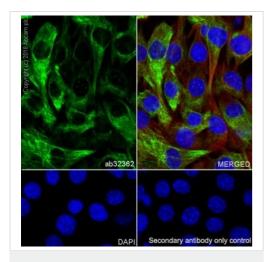
Images



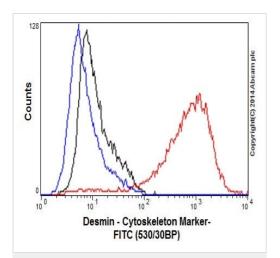
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human skeletal muscle tissue labelling Desmin with purified ab32362 at 1/2000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32362).



Immunocytochemistry/ Immunofluorescence - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)



Flow Cytometry (Intracellular) - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)

Immunocytochemistry/Immunofluorescence analysis of C2C12 (Mouse myoblasts myoblast) cells labeling Desmin with <u>ab32362</u> at 1/500. Cells were fixed with 100% Methanol. <u>ab150077</u>, an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

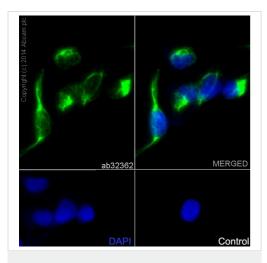
ab195889, Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) 1/200 was used as counterstain antibody.

Confocal image showing cytoplasmic staining on C2C12 cell line.

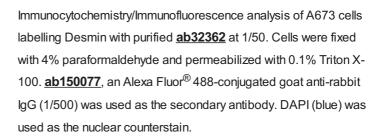
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32362).

Intracellular Flow Cytometry analysis of C2C12 cells labelling Desmin with purified ab32362 at 1/70 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit lgG (1/150) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal lgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32362).

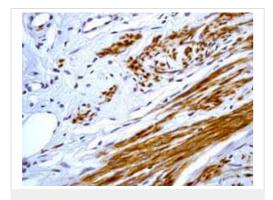


Immunocytochemistry/ Immunofluorescence - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)



Control: primary antibody (1/50) and secondary antibody, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32362).

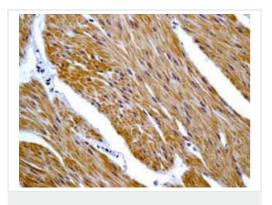


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of normal human uterus tissue labelling Desmin with unpurified **ab32362**.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32362).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of normal human urinary bladder tissue labelling Desmin with unpurified <u>ab32362</u>.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab32362</u>).

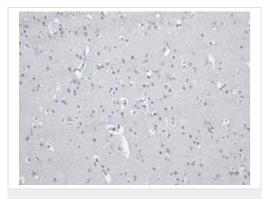


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of human skeletal muscle tissue labelling Desmin with unpurified ab32362.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab32362</u>).

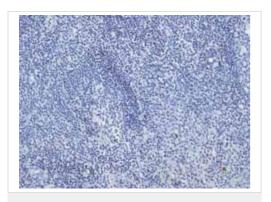


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of normal human brain tissue. Unpurified **ab32362** shows negative staining.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32362).

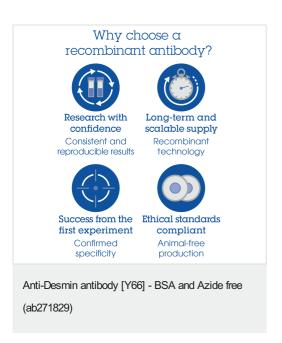


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Desmin antibody [Y66] - BSA and Azide free (ab271829)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of normal human tonsil tissue. Unpurified ab32362 shows negative staining.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab32362</u>).



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