# abcam

# Product datasheet

# Anti-Myogenin antibody [EPR4789] ab124800

Recombinant RabMAb

★★★★★ 3 Abreviews 40 References 5 Images

Overview

**Product name** Anti-Myogenin antibody [EPR4789]

**Description** Rabbit monoclonal [EPR4789] to Myogenin

**Host species** Rabbit

Specificity The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for

mouse and rat. This antibody has low affinity on skeletal muscle samples in WB. Please increase

protein or antibody amount to get satisfied results.

Suitable for: WB, IHC-P, ICC/IF **Tested applications** 

Unsuitable for: IP

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide within Human Myogenin. The exact sequence is proprietary.

Positive control WB: C2C12 and Human fetal muscle lysates; IHC-P: Human rhabdomyosarcoma tissue; ICC/IF:

ioSkeletal Myocytes - Human iPSC-Derived Skeletal Myocytes (ab277612).

General notes 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 RabMAb® 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

**Purity** Protein A purified

Clonality Monoclonal
Clone number EPR4789
Isotype IgG

## **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab124800 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
WB		1/200. Detects a band of approximately 34 kDa (predicted molecular weight: 25 kDa).  For unpurified use at 1/1000.00000 - 1/10000.00000
		This antibody has low affinity on skeletal muscle samples in WB. Please increase protein or antibody amount to get satisfied results.
IHC-P	**** <u>(1)</u>	1/500. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
		For unpurified use at 1/100.00000 - 1/250.00000
		The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
ICC/IF	<b>★★★★</b> (1)	Use a concentration of 0.5 - 5 µg/ml.

**Application notes** Is unsuitable for IP.

**Target** 

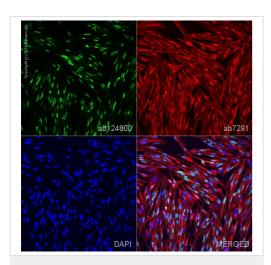
**Function** Involved in muscle differentiation (myogenic factor). Induces fibroblasts to differentiate into

myoblasts. Probable sequence specific DNA-binding protein.

Sequence similarities Contains 1 basic helix-loop-helix (bHLH) domain.

Cellular localization Nucleus.

# **Images**



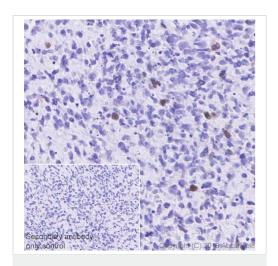
Immunocytochemistry/ Immunofluorescence - Anti-Myogenin antibody [EPR4789] (ab124800)

Immunofluorescence staining of Myogenin using ab124800 in ioSkeletal Myocytes - Human iPSC-Derived Skeletal Myocytes (ab277612), which were differentiated for 3 days post induction.

The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% PBS-Tween for 5 mins and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab124800 at 0.5 µg/mL and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin, at 1/1000 dilution. Cells were then incubated with ab150081, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150120, Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

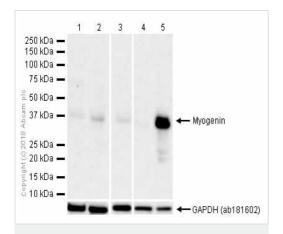
Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown. Gamma is adjusted to 1.5 in all channels.

The antibody ab124800 gave comparable results using MeOH fixation (100%, 5 min).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myogenin antibody
[EPR4789] (ab124800)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human rhabdomyosarcoma tissue sections labeling Myogenin with Purified ab124800 at 1:500 dilution (1.08 µg/ml). Heat mediated antigen retrieval was performed using using ab93684 (Tris/EDTA buffer, pH 9.0)ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody.Negative control:PBS instead of the primary antibody.Hematoxylinwas used as a counterstain



Western blot - Anti-Myogenin antibody [EPR4789] (ab124800)

**All lanes :** Anti-Myogenin antibody [EPR4789] (ab124800) at 0.5  $\mu$ g/ml (purified)

Lane 1: Human fetal skeletal muscle lysates

Lane 2: Rat fetal skeletal muscle lysates

Lane 3: Mouse fetal skeletal muscle lysates

Lane 4: C2C12 (Mouse myoblasts myoblast) whole cell lysates

Lane 5: C2C12 (Mouse myoblasts myoblast) treated with 2%

horse serum whole cell lysates

Lysates/proteins at 15 µg per lane.

#### Secondary

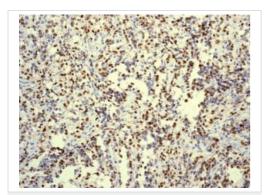
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 25 kDa

Blocking and diluting buffer: 5% NFDM/TBST.

This antibody has low affinity on skeletal muscle samples. Please increase protein or antibody amount to get satisfied results.

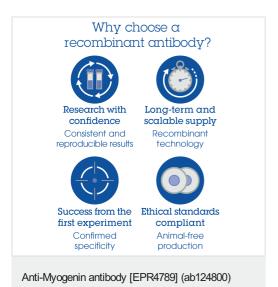
Myogenin expression is upregulated in C2C12 cells during differentiation process induced by horse serum treatment (PMID: 26563778).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myogenin antibody
[EPR4789] (ab124800)

Unpurified ab124800, at a 1/100 dilution, staining Myogenin in paraffin embedded Human rhabdomyosarcoma tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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