# abcam

### Product datasheet

## Anti-MyoD1 antibody [EPR6653-131] ab133627

重组 RabMAb

★★★★ 11 Abreviews 17 References 10 图像

概述

产品名称 Anti-MyoD1抗体[EPR6653-131]

描述 兔单克隆抗体[EPR6653-131] to MyoD1

宿主 Rabbit

经测试应用 适用于: ChIC/CUT&RUN-seq, WB, ICC/IF, IHC-P

种属反应性 与反应: Human

免疫原 Synthetic peptide corresponding to Human MyoD1 aa 50-150.

Database link: P15172

阳性对照 IHC-P: Human Rhabdomyosarcoma tissue WB: Human Rhabdomyosarcoma Cell Line Rh30, RD

(Human muscle rhabdomyosarcoma) whole cell lysate ICC/IF: RD (Human muscle

rhabdomyosarcoma) cell line. ChlC/CUT&RUN-Seq: RD (Human muscle rhabdomyosarcoma)

cells.

常规说明 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

**克隆** 单克隆

**克隆编号** EPR6653-131

**同种型** IgG

## 应用

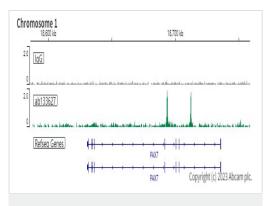
## The Abpromise guarantee Abpromise™承诺保证使用ab133627于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ChIC/CUT&RUN-seq		Use at an assay dependent concentration. 5µg
WB		1/1000. Detects a band of approximately 45 kDa (predicted molecular weight: 34 kDa).  Abcam recommends using milk as the blocking agent.
ICC/IF	**** <u>(1)</u>	1/100.
IHC-P	<b>★★★★ (5)</b>	1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

靶标	
功能	Involved in muscle differentiation (myogenic factor). Induces fibroblasts to differentiate into myoblasts. Activates muscle-specific promoters. Interacts with and is inhibited by the twist protein. This interaction probably involves the basic domains of both proteins.
序列相似性	Contains 1 basic helix-loop-helix (bHLH) domain.
翻译后修饰	Acetylated by a complex containing EP300 and PCAF. The acetylation is essential to activate target genes. Conversely, its deacetylation by SIRT1 inhibits its function.  Ubiquitinated on the N-terminus; which is required for proteasomal degradation.
细胞定位	Nucleus.

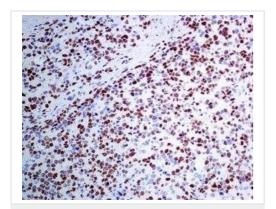
## 图片



ChIC/CUT&RUN sequencing - Anti-MyoD1 antibody [EPR6653-131] (ab133627)

ChIC/CUT&RUN was performed using a pAG-MNAse at a final concentration of 700 ng/mL,  $2.5 \times 10^5$  RD (Human muscle rhabdomyosarcoma) cells and  $5\mu g$  of ab133627 [EPR6653-131]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown.

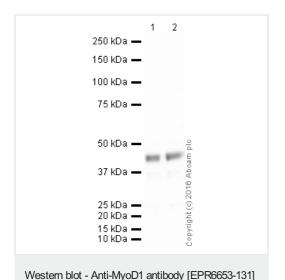
Additional screenshots of mapped reads can be downloaded <a href="here">here</a>. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MyoD1 antibody
[EPR6653-131] (ab133627)

Immunohistochemical analysis of MyoD1 in paraffin embedded Human rhabdomyosarcoma tissue, using ab133627 at a dilution of 1/250.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



(ab133627)

**All lanes :** Anti-MyoD1 antibody [EPR6653-131] (ab133627) at 1/1000 dilution

Lane 1 : Rh30 (Human Rhabdomyosarcoma) Whole Cell Lysate at 5 µg

Lane 2 : Rh30 (Human Rhabdomyosarcoma) Whole Cell Lysate at 10 µg

#### Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 34 kDa **Observed band size:** 45 kDa

#### Exposure time: 4 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% Milk before being incubated with ab133627 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.

ab133627 detects a band at 45 kDa, while this differs to its predicted molecular weight of 34 kDa, the banding pattern observed is consistent with what has been described in the literature PMID:19352326.

1 2 3

250 kDa = 150 kDa = 100 kDa = 75 kDa = 37 kDa = 4 GAPDH

Western blot - Anti-MyoD1 antibody [EPR6653-131] (ab133627)

**All lanes :** Anti-MyoD1 antibody [EPR6653-131] (ab133627) at 1/1000 dilution

Lane 1 : RD (Human muscle rhabdomyosarcoma) whole cell lysate
Lane 2 : HEK-293 (human embryonic kidney epithelial cell) whole
cell lysate

Lane 3 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

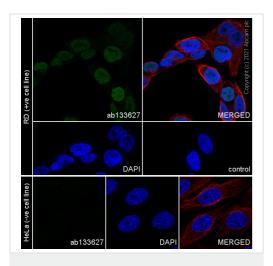
**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size:** 34 kDa **Observed band size:** 45 kDa

Exposure time: 37 seconds

Blocking and diluting buffer: 5% NFDM/TBST

Negative control: HEK-293, HeLa (PMID: 17028574)



Immunocytochemistry/ Immunofluorescence - Anti-MyoD1 antibody [EPR6653-131] (ab133627)

Immunocytochemical analysis of 4% paraformaldehyde fixed, 0.1% TritonX-100 permeabilised RD cell line labeling MyoD1 with ab133627 at 1/100 diltuon. <a href="mailto:ab150077">ab150077</a> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) was used as a secondary antibody at 1/1000 dilution. Counterstained with <a href="mailto:ab195889">ab195889</a> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594). Nuclear staining: DAPI.

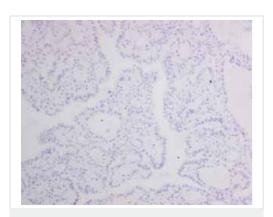
Confocal image showing nuclear staining in RD cell line Negative control: HeLa (PMID: 17028574)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MyoD1 antibody
[EPR6653-131] (ab133627)

ab133627 showing negative staining in Normal heart tissue.

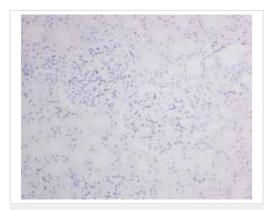
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MyoD1 antibody
[EPR6653-131] (ab133627)

ab133627 showing negative staining in Thyroid gland carcinoma tissue.

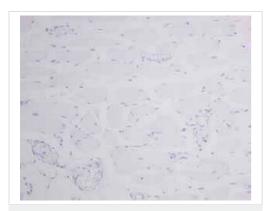
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MyoD1 antibody
[EPR6653-131] (ab133627)

ab133627 showing negative staining in Normal kidney tissue.

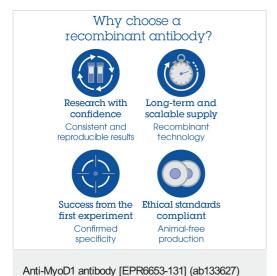
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MyoD1 antibody
[EPR6653-131] (ab133627)

ab133627 showing negative staining in Skeletal muscle tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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