



## Product datasheet

# HRP Anti-muscle Actin antibody [EPR8484] - Loading Control ab185058

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [2 References](#) [2 Images](#)

### Overview

<b>Product name</b>	HRP Anti-muscle Actin antibody [EPR8484] - Loading Control
<b>Description</b>	HRP Rabbit monoclonal [EPR8484] to muscle Actin - Loading Control
<b>Host species</b>	Rabbit
<b>Conjugation</b>	HRP
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human muscle Actin aa 350-450. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <b>contact</b> our Scientific Support team to discuss your requirements. Database link: <a href="#">P68032</a>
	<div>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	NIH 3T3 cell lysate; Human fetal artery, kidney and heart lisates; Human uterus, stomach and skeletal muscle lysates; Human skeletal muscle tissue; Human smooth muscle in colon tissue; Human heart muscle tissue.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.

<b>Storage buffer</b>	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: 30% Glycerol (glycerin, glycerine), PBS, 1% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR8484
<b>Isotype</b>	IgG

## Applications

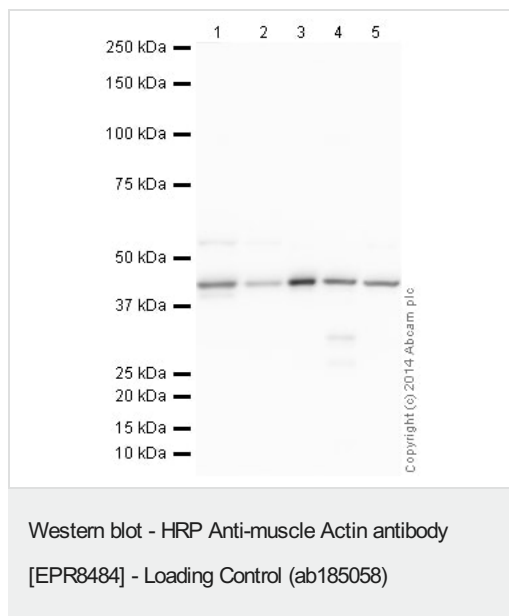
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab185058 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/10000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa).

## Target

<b>Function</b>	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
<b>Involvement in disease</b>	<p>Defects in ACTA1 are the cause of nemaline myopathy type 3 (NEM3) [MIM:161800]. A form of nemaline myopathy. Nemaline myopathies are muscular disorders characterized by muscle weakness of varying severity and onset, and abnormal thread-or rod-like structures in muscle fibers on histologic examination. The phenotype at histological level is variable. Some patients present areas devoid of oxidative activity containing (cores) within myofibers. Core lesions are unstructured and poorly circumscribed.</p> <p>Defects in ACTA1 are a cause of myopathy, actin, congenital, with excess of thin myofilaments (MPCETM) [MIM:161800]. A congenital muscular disorder characterized at histological level by areas of sarcoplasm devoid of normal myofibrils and mitochondria, and replaced with dense masses of thin filaments. Central cores, rods, ragged red fibers, and necrosis are absent.</p> <p>Defects in ACTA1 are a cause of congenital myopathy with fiber-type disproportion (CFTD) [MIM:255310]; also known as congenital fiber-type disproportion myopathy (CFTDM). CFTD is a genetically heterogeneous disorder in which there is relative hypotrophy of type 1 muscle fibers compared to type 2 fibers on skeletal muscle biopsy. However, these findings are not specific and can be found in many different myopathic and neuropathic conditions.</p>
<b>Sequence similarities</b>	Belongs to the actin family.
<b>Post-translational modifications</b>	Oxidation of Met-46 by MICALs (MICAL1, MICAL2 or MICAL3) to form methionine sulfoxide promotes actin filament depolymerization. Methionine sulfoxide is produced stereospecifically, but it is not known whether the (S)-S-oxide or the (R)-S-oxide is produced.
<b>Cellular localization</b>	Cytoplasm > cytoskeleton.

## Images



**All lanes :** HRP Anti-muscle Actin antibody [EPR8484] - Loading Control (ab185058) at 1/10000 dilution

**Lane 1 :** NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate at 20 µg

**Lane 2 :** Human kidney tissue lysate - total protein (**ab30203**) at 20 µg

**Lane 3 :** Human Fetal Heart at 5 µg

**Lane 4 :** Human skeletal muscle tissue lysate - total protein (**ab29330**) at 10 µg

**Lane 5 :** Skeletal Muscle (Rat) Tissue Lysate at 10 µg

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 42 kDa

**Additional bands at:** 42 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 5 seconds

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 5% Bovine Serum Albumin before being incubated with ab185058 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

HRP Anti-muscle Actin antibody [EPR8484] -  
Loading Control (ab185058)

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

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