

Product datasheet

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

Recombinant RabMAb

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

Overview

Product name	HRP Anti-muscle Actin antibody [EPR8484] - Loading Control
Description	HRP Rabbit monoclonal [EPR8484] to muscle Actin - Loading Control
Host species	Rabbit
Conjugation	HRP
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	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 contact our Scientific Support team to discuss your requirements. Database link: P68032 Run BLAST with Run BLAST with
Positive control	NIH 3T3 cell lysate; Human fetal artery, kidney and heart lysates; Human uterus, stomach and skeletal muscle lysates; Human skeletal muscle tissue; Human smooth muscle in colon tissue; Human heart muscle tissue.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- 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. Avoid freeze / thaw cycle. Store In the Dark.

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

Function	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
Involvement in disease	<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>
Sequence similarities	Belongs to the actin family.
Post-translational modifications	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.
Cellular localization	Cytoplasm > cytoskeleton.

Images



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

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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