# abcam

## **Product datasheet**

# Anti-Actin antibody [mAbGEa] ab230169

### <u>3 References</u> 2 图像

概述		
产品名称	Anti-Actin <b>抗体</b> [mAbGEa]	
描述	小鼠单克隆抗体[mAbGEa] to Actin	
宿主	Mouse	
经测试应 <b>用</b>	适用于: IHC-P, WB	
<b>种属反应性</b>	与反应: Mouse, Rat, Human, Drosophila melanogaster	
	预测可用于: Xenopus laevis, Plants, Mammals, Fungi 🛛 🔺	
免疫原	Full length native protein (purified) corresponding to Arabidopsis thaliana Actin.	
<b>阳性</b> 对照	WB: HeLa, NIH/3T3 and PC-12 cell lysate; Drosophila lysate. IHC-P: FFPE human normal colon tissue sections.	
<b>常</b> 规说 <b>明</b>	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <b>orders@abcam.com</b> .	
	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.	
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As	
性能		
形式	Liquid	
存 <b>放</b> 说明	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.	
存储溶液	Preservative: 0.02% Sodium azide Constituent: PBS	

克隆编号 同种型 单**克隆** 

lgМ

mAbGEa

克隆

#### 应用

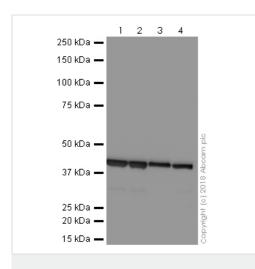
#### The Abpromise guarantee Abpromi

#### Abpromise™承诺保证使用ab230169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
IHC-P		Use a concentration of 1 $\mu$ g/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use a concentration of 1 $\mu$ g/ml. Predicted molecular weight: 42 kDa. Abcam recommends a 3% milk block for this product.

靶标	
功能	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
疾病相关	<ul> <li>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 containg (cores) within myofibers. Core lesions are unstructured and poorly circumscribed.</li> <li>Defects in ACTA1 are a cause of myopathy 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.</li> <li>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.</li> </ul>
序列相似性	Belongs to the actin family.
细 <b>胞定位</b>	Cytoplasm > cytoskeleton.



Western blot - Anti-Actin antibody [mAbGEa] (ab230169) All lanes : Anti-Actin antibody [mAbGEa] (ab230169) at 1 µg/ml

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 2 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate
Lane 3 : PC12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate
Lane 4 : Drosophila lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** HRP conjugated Goat Anti-Mouse IgG (H+L) at 1/1500 dilution

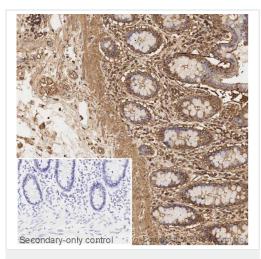
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 42 kDa

Exposure time: 10 seconds

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 55 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 ab230169 overnight at 4°C. Antibody binding was detected using a goat anti-mouse antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Actin antibody [mAbGEa] (ab230169)

IHC image of beta actin staining in a section of formalin-fixed paraffin-embedded normal human normal colon\* performed on a Leica BOND<sup>TM</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab230169, 1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

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