

### Anti-beta Actin antibody [AC-15] ab6276

敲除验证

★★★★★ [94 Abreviews](#) [2211 References](#) [6 图像](#)

#### 概述

产品名称	Anti-beta Actin抗体[AC-15]
描述	小鼠单克隆抗体[AC-15] to beta Actin
宿主	Mouse
经测试应用	适用于: ICC/IF, WB
种属反应性	与反应: Mouse, Rat, Cow, Dog, Human, African green monkey, Chinese hamster 不与反应: Drosophila melanogaster, Dictyostelium discoideum
免疫原	Synthetic peptide corresponding to beta Actin aa 1-100 (N terminal) conjugated to keyhole limpet haemocyanin. Slightly modified $\beta$ -cytoplasmic actin N-terminal peptide, Ac-Asp-Asp-Asp-Ile-Ala-Ala-Leu-Val-Ile-Asp-Asn-Gly-Ser-Gly-Lys, conjugated to KLH. <a href="#">Run BLAST with Expasy</a> <a href="#">Run BLAST with NCBI</a>
表位	N-terminal of the beta isoform of actin.
阳性对照	ICC/IF: SV40LT-SMC cells WB: HAP1, HeLa, Jurkat, A431, HEK-293, COS-7, NIH/3T3, PC-12, Rat2, CHO, MDBK and MDCK cell lysates.
常规说明	<p>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.</p> <p>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&amp;As</p>

#### 性能

形式	Liquid
存放说明	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	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: PBS
纯度	Affinity purified

纯化说明	Purified from hybridoma cell culture.
克隆	单克隆
克隆编号	AC-15
同种型	IgG1

应用

The Abpromise guarantee      **Abpromise™**承诺保证使用ab6276于以下的经测试应用

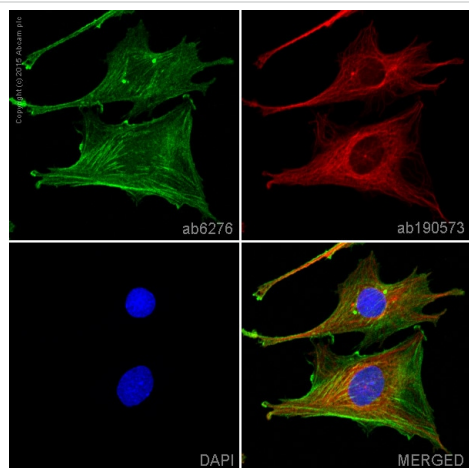
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF	★★★★★ (9)	Use a concentration of 5 µg/ml.
WB	★★★★★ (76)	1/5000 - 1/16000. Predicted molecular weight: 42 kDa.

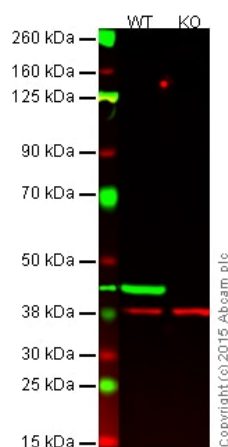
靶标

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	Defects in ACTB are a cause of dystonia juvenile-onset (DYTJ) [MIM:607371]. DYTJ is a form of dystonia with juvenile onset. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYTJ patients manifest progressive, generalized, dopa-unresponsive dystonia, developmental malformations and sensory hearing loss.
序列相似性	Belongs to the actin family.
翻译后修饰	ISGylated.
细胞定位	Cytoplasm > cytoskeleton. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

图片



Immunocytochemistry/ Immunofluorescence - Anti-beta Actin antibody [AC-15] (ab6276)



Western blot - Anti-beta Actin antibody [AC-15] (ab6276)

ab6276 staining beta Actin in SV40LT-SMC cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized in 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab6276 at a working concentration of 5µg/ml and **ab190573**, Rabbit monoclonal [EP1332Y] to alpha Tubulin (Alexa Fluor® 647, shown in red) at 1/250 overnight at +4°C, followed by a further incubation at room temperature for 1h with an **anti-mouse AlexaFluor® 488 (ab150117)** at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

**All lanes :** Anti-beta Actin antibody [AC-15] (ab6276) at 1/5000 dilution

**Lane 1 :** Wild-type HAP1 cell lysate (20 µg)

**Lane 2 :** Beta actin knockout HAP1 cell lysate (20 µg)

#### Secondary

**All lanes :** Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (**ab216772**) at 1/10000 dilution

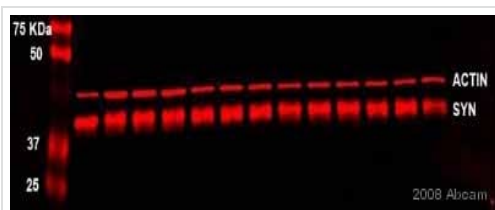
**Predicted band size:** 42 kDa

**Lane 1:** Wild-type HAP1 cell lysate (20 µg)

**Lane 2:** Beta actin knockout HAP1 cell lysate (20 µg)

**Lanes 1 and 2:** Merged signal (red and green). Green - beta actin, ab6276 observed at 42 kDa. Red - loading control, **ab181602** observed at 37 kDa.

Ab6276 was shown to specifically react with beta actin in wild-type HAP1 cells. No band was observed when beta actin knockout samples were used. Wild-type and beta actin knockout samples were subjected to SDS-PAGE. ab6276 (beta actin) and **ab181602** (loading control to GAPDH) were diluted 1/5000 and 1/10 000 and incubated overnight at 4°C. Blots were developed with **Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (ab216772)** and **Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (ab216777)** secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.

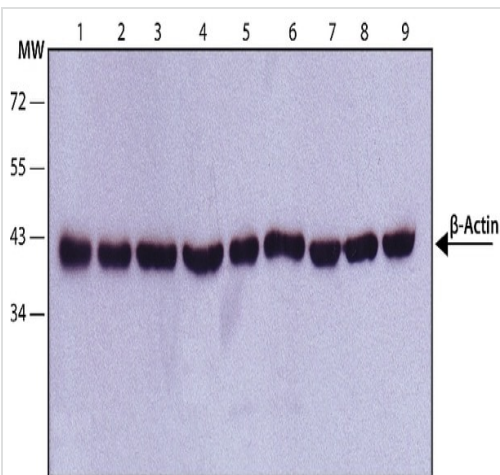


Western blot - Anti-beta Actin antibody [AC-15]  
(ab6276)

This image is courtesy of an Abreview submitted by Dr Mark Elliott

Western Blot of ab6276 (used as loading control) with whole tissue lysate of human grey matter from BA20 (temporal cortex). Ab6276 was diluted 1/50000 and incubated with the sample for 16 hours at 4°C. 5 µg of lysate was loaded onto the gel, which was blocked with 5% milk for 1 hour at 20°C. An Alexa Fluor® 680 conjugated goat anti-mouse antibody, diluted 1/5000, was used as the secondary.

Bands below actin in image are synaptophysin (SYN).



Western blot - Anti-beta Actin antibody [AC-15]  
(ab6276)

**All lanes :** Anti-beta Actin antibody [AC-15] (ab6276) at 1 µg/ml

**Lane 1 :** HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

**Lane 2 :** Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate

**Lane 3 :** COS-7 (african green monkey kidney fibroblast-like cell line) cell lysate

**Lane 4 :** NIH/3T3 (mouse embryonic fibroblast cell line) cell lysate

**Lane 5 :** PC-12 (rat adrenal gland pheochromocytoma cell line) cell lysate

**Lane 6 :** Rat2 (rat fibroblast cell line) cell lysate

**Lane 7 :** CHO (chinese hamster ovary cell line) cell lysate

**Lane 8 :** MDBK (bovine kidney cell line) cell lysate

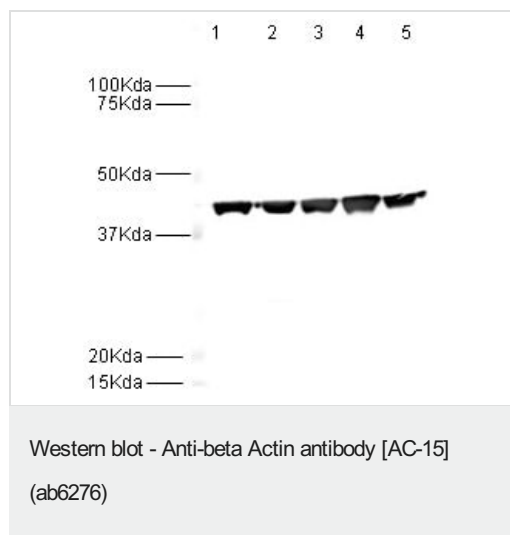
**Lane 9 :** MDCK (canine kidney cell line) cell lysate

### Secondary

**All lanes :** Goat Anti-Mouse IgG-Peroxidase

Developed using the ECL technique.

**Predicted band size:** 42 kDa



**All lanes :** Anti-beta Actin antibody [AC-15] (ab6276) at 1/5000 dilution

**Lane 1 :** HeLa nuclear

**Lane 2 :** HeLa whole cell lysate

**Lane 3 :** A431 cell lysate

**Lane 4 :** Jurkat cell lysate

**Lane 5 :** HEK293 cell lysate

Lysates/proteins at 20 µg per lane.

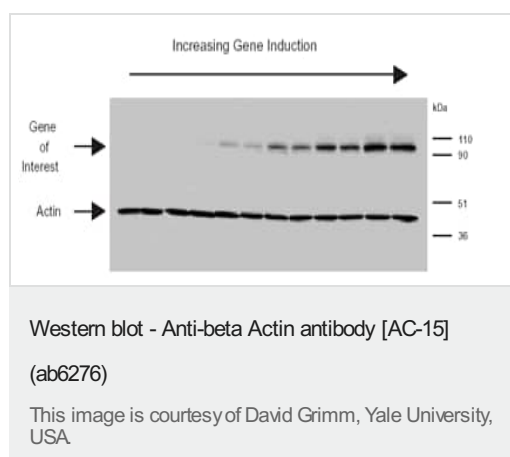
## Secondary

**All lanes :** Alexa Fluor anti mouse at 1/5000 dilution

Performed under reducing conditions.

**Predicted band size:** 42 kDa

**Observed band size:** 42 kDa



MDCK cells induced with increasing amounts of doxycycline to control expression of the gene of interest. All cells were normalized for loading with an albumin protein standard assay. Anti-beta actin (ab6276) was used at a concentration of 1:5000 in a milk blocking solution. B-actin blotting confirms the albumin assay in showing that an equal amount of lysate was loaded in each lane.

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