abcam

Product datasheet

Anti-beta Actin antibody [EPR21242] ab241153

敲除验证 重组

4 图像

概述

产品名称	Anti-beta Actin**抗体**[EPR21242]
描述	**兔单克隆抗体**[EPR21242] to beta Actin
宿主	Rabbit
特异性	In-house testing showed ab241153 to react with gamma actin in western blot.
经测试应用	**适用于:** WB, ICC/IF
种属反应性	**与反应:** Mouse, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	ICC/IF: Methanol-fixed HeLa and NIH3T3 cells. WB: HAP1, MEF1 and NIH3T3 whole cell lysates
常规说明	This product was made using **synthetic libraries and phage display technology**. This antibody is a recombinant chimeric antibody. Rabbit chimeric monoclonal antibody (Human Fab/ Rabbit Fc).

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	Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
克隆	单克隆
克隆编号	EPR21242
同种型	IgG1

应用

The Abpromise guarantee **Abpromise™承诺保证使用**ab241153**于以下的**经测试应用

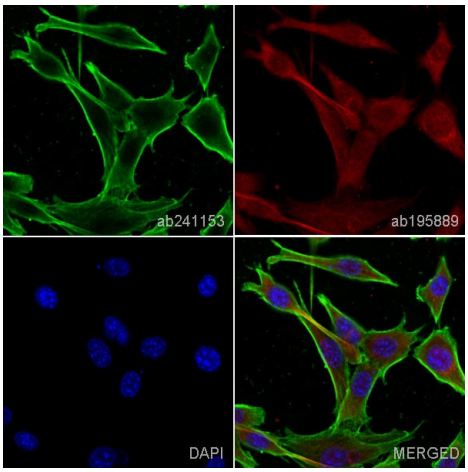
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 42 kDa.
ICC/IF		Use at an assay dependent concentration.

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	lSGylated.
细胞定位	Cytoplasm > cytoskeleton. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

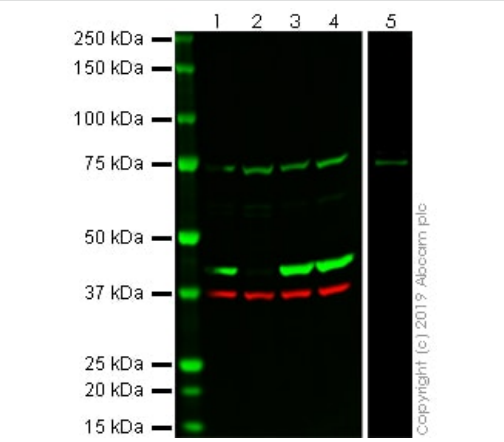
图片



Immunocytochemistry/ Immunofluorescence - Anti-beta Actin antibody [EPR21242] (ab241153)

ab213243 staining beta-Actin in NIH3T3 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab241153 at 0.5ugml then detected with an Alexa Fluor® 488 goat anti-rabbit secondary antibody (**ab150081**) at a 1/1000 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue), and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red).

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



Western blot - Anti-beta Actin antibody [EPR21242] (ab241153)

All lanes :

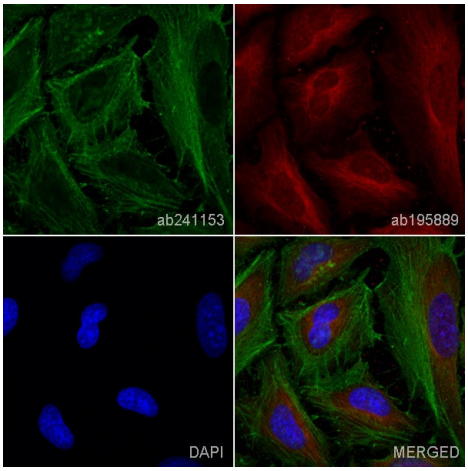
Lane 1 : HAP1 whole cell lysate at 20 µg
Lane 2 : HAP1 ACTNB whole cell lysate at 20 µg
Lane 3 : NIH3T3 whole cell lysate at 20 µg
Lane 4 : MEF whole cell lysate at 20 µg
Lane 5 : Recombinant Human gamma Actin protein (**ab157841**)

Performed under reducing conditions.

Predicted band size: 42 kDa

ab241153 was shown to react with ACTNB (beta actin) when tested against HAP1 wild-type and HAP1 ACTNB (beta actin) knockout cells. ACTNB wild-type and knockout samples were subjected to SDS-PAGE and incubated with **ab231153**. Incomplete reduction of signal was seen in the ACTNB (beta actin) knockout samples at beta actin's expected molecular weight. SDS-PAGE of gamma actin recombinant protein and incubation with ab241153 showed cross-reactivity to gamma actin.

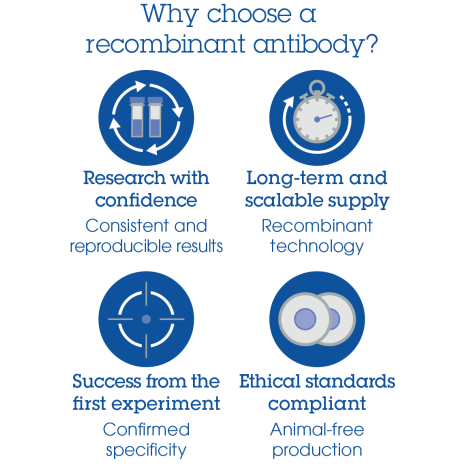
ab241153 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at a 1ug/ml and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-beta Actin antibody [EPR21242] (ab241153)

ab213243 staining beta-Actin in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab241153 at 0.01ugml then detected with an Alexa Fluor® 488 goat anti-rabbit secondary antibody (**ab150081**) at a 1/1000 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue), and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red).

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



Anti-beta Actin antibody [EPR21242] (ab241153)

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.cn/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors