


### Anti-beta Actin antibody [EPR21241] ab213262

KO 評価済 リコンビナント

★★★★★ [2 Abreviews](#) [7 References](#) [画像数 4](#)

#### 製品の概要

製品名	Anti-beta Actin antibody [EPR21241]
製品の詳細	Rabbit monoclonal [EPR21241] to beta Actin
由来種	Rabbit
特異性	In-house testing showed ab213262 to react with gamma actin in western blot.
アプリケーション	<b>適用あり:</b> WB, ICC/IF
種交差性	<b>交差種:</b> Mouse, Human <b>交差が予測される動物種:</b> Cow, Dog, Pig 
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	ICC/IF: Methanol-fixed HeLa and NIH3T3 cells. WB: HAP1, MEF1 and NIH3T3 cells
特記事項	This product was made using <b><u>synthetic libraries and phage display technology</u></b> . This antibody is a recombinant chimeric antibody. Rabbit chimeric monoclonal antibody (Human Fab/ Rabbit Fc). If this antibody is used as a loading control in WB and if the signal of the gamma actin is close to the protein of interest to be detected, we recommend cutting the membrane between the expected signals of beta actin and gamma actin and to stain the two parts containing the loading control and the protein of interest separately.

#### 製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR21241
アイソタイプ	IgG1

## アプリケーション

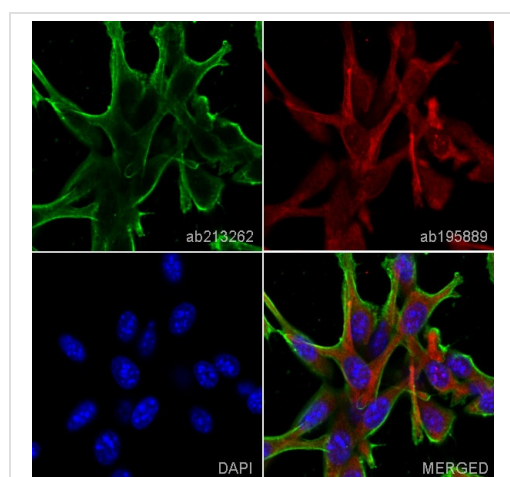
**The Abpromise guarantee**      **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab213262の使用に適用されず  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Predicted molecular weight: 42 kDa.
ICC/IF		Use a concentration of 0.05 - 0.5 µg/ml.

## ターゲット情報

<b>機能</b>	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
<b>関連疾患</b>	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.
<b>配列類似性</b>	Belongs to the actin family.
<b>翻訳後修飾</b>	ISGylated.
<b>細胞内局在</b>	Cytoplasm > cytoskeleton. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

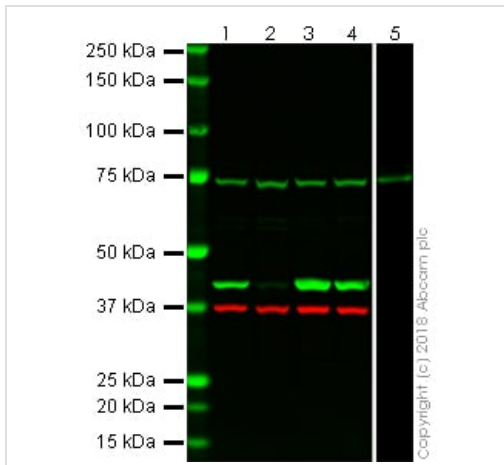
## 画像



Immunocytochemistry/ Immunofluorescence - Anti-beta Actin antibody [EPR21241] (ab213262)

**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 ab213262 at 0.5ug/ml 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 [EPR21241]  
(ab213262)

**All lanes :**

**Lane 1 :** HAP1 whole cell lysate at 20 µg

**Lane 2 :** HAP1 ACTNB knockout whole cell lysate at 20 µg

**Lane 3 :** MEF1 whole cell lysate at 20 µg

**Lane 4 :** NIH3T3 whole cell lysate at 20 µg

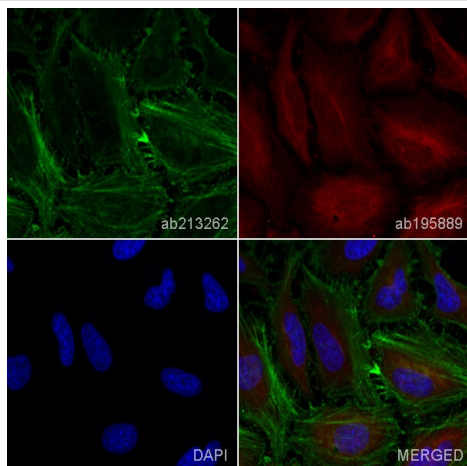
**Lane 5 :** Recombinant Human gamma Actin protein (**ab157841**) at 0.1 µg

Performed under reducing conditions.

**Predicted band size:** 42 kDa

ab213262 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 ab213262. 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 ab213262 showed cross-reactivity to gamma actin.

ab213262 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at a 1µg/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 [EPR21241] (ab213262)

**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 ab213262 at 0.01ug/ml 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).

### Why choose a recombinant antibody?



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Anti-beta Actin antibody [EPR21241] (ab213262)

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