


## Product datasheet

# Anti-beta Actin antibody [mAbcam 8226] - Loading Control (HRP) ab20272

★★★★★ 20 Abreviews 133 References 3 Images

### Overview

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<b>Product name</b>	Anti-beta Actin antibody [mAbcam 8226] - Loading Control (HRP)
<b>Description</b>	Mouse monoclonal [mAbcam 8226] to beta Actin - Loading Control (HRP)
<b>Host species</b>	Mouse
<b>Conjugation</b>	HRP
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Rabbit, Chicken, Cow, Dog, Human, Pig, Drosophila melanogaster, African green monkey, Chinese hamster <b>Predicted to work with:</b> Sheep, Horse, Guinea pig 
<b>Immunogen</b>	Synthetic peptide conjugated to KLH derived from within residues 1 - 100 of Human beta Actin. Read Abcam's proprietary immunogen policy
<b>Positive control</b>	HeLa whole cell lysate, 3T3 whole cell lysate, Rat brain lysate

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C. Store In the Dark.
<b>Storage buffer</b>	pH: 7.40 Constituents: PBS, 50% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	mAbcam 8226
<b>Myeloma</b>	Sp2/0-Ag14
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

### Applications

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Our [Abpromise guarantee](#) covers the use of **ab20272** in the following tested applications.

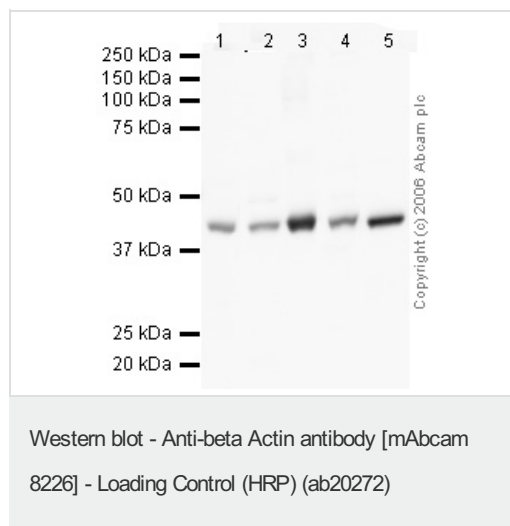
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★	1/5000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa). Can be blocked with <a href="#">Human beta Actin peptide (ab13772)</a> . Abcam strongly recommends blocking and incubation using 5% BSA as we have found that use of 5% milk seems to drastically reduce the intensity of the signal obtained. Please refer to WB image for further details.

## Target

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

## Images



**All lanes :** Anti-beta Actin antibody [mAbcam 8226] - Loading Control (HRP) (ab20272) at 1/5000 dilution

- Lane 1 :** human testis lysate
- Lane 2 :** human brain lysate
- Lane 3 :** human tonsil lysate
- Lane 4 :** mouse brain lysate
- Lane 5 :** mouse spleen lysate

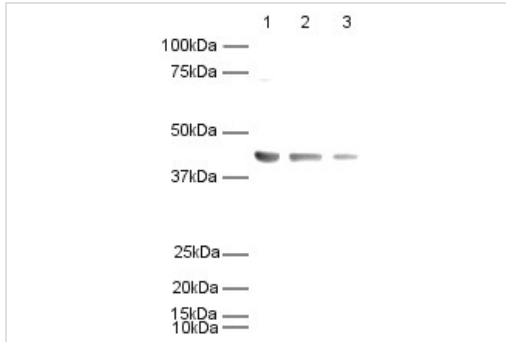
Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 42 kDa

**Exposure time:** 2 minutes



Western blot - Anti-beta Actin antibody [mAbcam 8226] - Loading Control (HRP) (ab20272)

**All lanes :** Anti-beta Actin antibody [mAbcam 8226] - Loading Control (HRP) (ab20272) at 1/5000 dilution

**Lane 1 :** HeLa whole cell lysate

**Lane 2 :** 3T3 whole cell lysate

**Lane 3 :** Rat brain lysate

Lysates/proteins at 20 µg per lane.

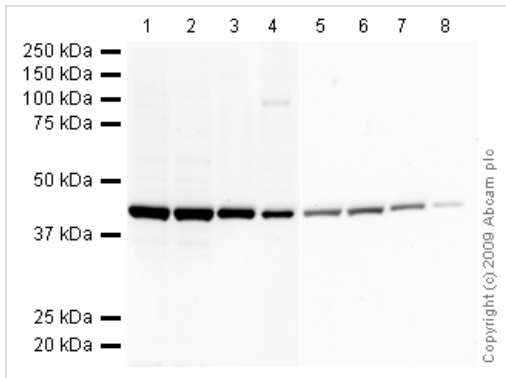
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 42 kDa

**Observed band size:** 42 kDa

**Exposure time:** 30 seconds



Western blot - Anti-beta Actin antibody [mAbcam 8226] - Loading Control (HRP) (ab20272)

**Lanes 1-4 :** Anti-beta Actin antibody [mAbcam 8226] - Loading Control (HRP) (ab20272) at 1/5000 dilution (Blocked in 5% BSA)

**Lanes 5-8 :** Anti-beta Actin antibody [mAbcam 8226] - Loading Control (HRP) (ab20272) at 1/5000 dilution (Blocked in 5% MILK)

**Lanes 1 & 5 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lanes 2 & 6 :** Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lanes 3 & 7 :** NIH 3T3 whole cell lysate ([ab7179](#))

**Lanes 4 & 8 :** PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 42 kDa

**Observed band size:** 42 kDa

**Exposure time:** 1 minute

The membrane 1-4 was blocked in 5% BSA (1 hour). The membrane 5-8 was blocked in 5% MILK (1 hour). Abcam routinely uses 5% BSA to block, however following recent customer feedback our labs investigated the effect of 5% milk blocking. We can now confirm that milk is not a suitable blocking agent for this antibody and significantly decreases the signal on the membrane.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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