# abcam

## Product datasheet

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

#### Overview

Product name HRP Anti-beta Actin antibody [mAbcam 8226] - Loading Control

Description HRP Mouse monoclonal [mAbcam 8226] to beta Actin - Loading Control

Host species Mouse
Conjugation HRP

Tested applications Suitable for: WB

**Species reactivity** Reacts with: Mouse, Rat, Human

Predicted to work with: Sheep, Rabbit, Horse, Chicken, Guinea pig, Cow, Dog, Pig,

Drosophila melanogaster, Monkey, African green monkey, Chinese hamster

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

(Peptide available as ab13772)

Positive control HeLa whole cell lysate, 3T3 whole cell lysate, Rat brain lysate

**General notes**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

#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

**Storage buffer** pH: 7.40

Preservative: 0.1% Proclin 300 Solution

Constituents: PBS, 1% BSA, 30% Glycerol (glycerin, glycerine)

Purity lgG fraction
Clonality Monoclonal

1

Clone number mAbcam 8226

Myeloma Sp2/0-Ag14

**lsotype** lgG1 **Light chain type** kappa

#### **Applications**

## The Abpromise guarantee 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	<b>★★★★★ (17)</b>	1/5000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa). Can be blocked with <a href="Human beta">Human beta</a> <a href="Actin peptide">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**

**Function** Actins are highly conserved proteins that are involved in various types of cell motility and are

ubiquitously expressed in all eukaryotic cells.

Involvement in disease 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.

**Sequence similarities**Belongs to the actin family.

Post-translational

modifications

ISGylated.

Cytoplasm > cytoskeleton. Localized in cytoplasmic mRNP granules containing untranslated

mRNAs.

#### **Images**



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

All lanes: HRP Anti-beta Actin antibody [mAbcam 8226] - Loading

Control (ab20272) at 1/5000 dilution

Lane 1 : HeLa whole cell lysate
Lane 2 : 3T3 whole cell lysate

Lane 3: Rat brain lysate

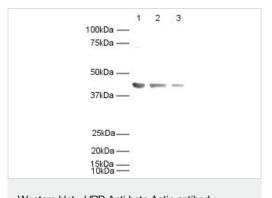
Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

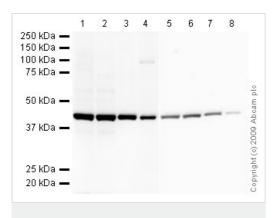
Performed under reducing conditions.

**Predicted band size:** 42 kDa **Observed band size:** 42 kDa

Exposure time: 30 seconds



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



Western blot - HRP Anti-beta Actin antibody [mAbcam 8226] - Loading Control (ab20272) Lanes 1-4: HRP Anti-beta Actin antibody [mAbcam 8226] Loading Control (ab20272) at 1/5000 dilution (Blocked in 5% BSA)
Lanes 5-8: HRP Anti-beta Actin antibody [mAbcam 8226] Loading Control (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. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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