## abcam

### **Product datasheet**

# Anti-beta Actin antibody [mAbcam 8226] - BSA and Azide free ab264083

★★★★★ <u>4 Abreviews</u> <u>1 References</u> 3 图像

岬	*
熌	尐

产品名称	Anti-beta Actin抗体[mAbcam 8226] - BSA and Azide free		
描述	<b>小鼠单克隆抗体</b> [mAbcam 8226] to beta Actin - BSA and Azide free		
宿主	Mouse		
特异性	Does not cross-react with adult cardiac, smooth, or skeletal muscle actin. The immunogen used for this product shares 77% homology with Gamma actin/actin cytoplasmic 2. Cross-reactivity with this protein has not been confirmed experimentally.		
经 <b>测</b> 试应 <b>用</b>	适用于: WB, ICC/IF, IHC-P		
<b>种属反应性</b>	与反应: Mouse, Rat, Human 预测可用于: Sheep, Rabbit, Horse, Chicken, Guinea pig, Cow, Dog, Pig, Monkey, Zebrafish,		
	African green monkey, Chinese hamster, Armenian hamster 🛛 🔺		
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as <b>ab13772</b> )		
<b>阳性</b> 对照	WB, ICC/IF, Flow Cyt (Intra): HeLa, Jurkat, A431, HEK293, NIH 3T3, PC12 cells. IHC-P: Human colon (FFPE), Rat colon (FFPE). ICC/IF: Rat colon cancer cells.		
<b>常</b> 规说 <b>明</b>	ab264083 is the carrier-free version of <u>ab8226</u> .		
	Western blot protocol advice:		
	We recommend blocking with 2-5% BSA as we have found that use of 5% milk significantly reduces the band intensity for beta actin. Please see the comparison data in the images section. If milk block is required, we recommend using <u>ab8224</u> mouse monoclonal [mAbcam 8224] to beta actin. Contact our Scientific Support team for more information or advice. This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or		
	conjugation for your experiments, please contact orders@abcam.com.		
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.		
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.		
	Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes		

with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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

性能	
形式	Liquid
存 <b>放</b> 说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.40 Constituent: PBS
无载体	是一些人们的意思。
纯 <b>度</b>	Protein G purified
克隆	单 <b>克隆</b>
<b>克隆</b> 编号	mAbcam 8226
骨髓瘤	Sp2/0-Ag14
同种型	lgG1
轻链类型	карра

#### 应用

#### The Abpromise guarantee Abpromise ™承诺保证使用ab264083于以下的经测试应用

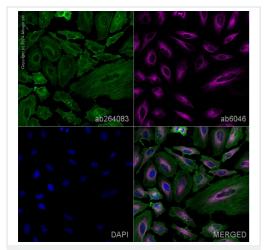
"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★ ★ ★ ★ ☆ <u>(3)</u>	<ul> <li>1/500 - 1/10000. Predicted molecular weight: 42 kDa.Can be blocked with <u>Human beta Actin peptide (ab13772)</u>.</li> <li>We recommend blocking using 2-5% BSA as we have found that use of 5% milk significantly reduces the band intensity for beta actin. Please refer to the images section for the blocking comparison data.</li> </ul>
ICC/IF		Use a concentration of 5 µg/ml.

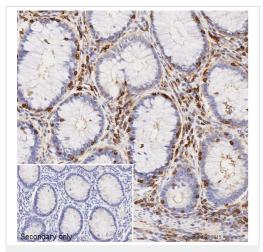
应用	Ab评论	说明
IHC-P		Use a concentration of 0.1 - 0.5 $\mu$ g/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

<b>靶</b> 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.
<b>疾病相</b> 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.
<b>翻</b> 译 <b>后修</b> 饰	ISGylated.
细 <b>胞定位</b>	Cytoplasm > cytoskeleton. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

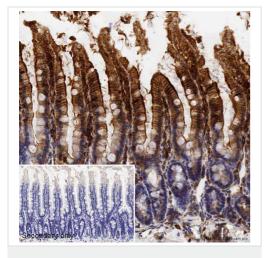
图片



Immunocytochemistry/ Immunofluorescence - Antibeta Actin antibody [mAbcam 8226] - BSA and Azide free (ab264083) ab264083 staining beta Actin in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-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 ab264083 at 5µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor<sup>®</sup> 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor<sup>®</sup> 594) at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta Actin antibody [mAbcam 8226] - BSA and Azide free (ab264083)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta Actin antibody [mAbcam 8226] - BSA and Azide free (ab264083)

IHC image of <u>ab8226</u> staining beta Actin in human colon formalin fixed paraffin embedded tissue sections\*, performed on a Leica Bond. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with <u>ab8226</u>, 0.1µg/ml working concentration, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. No primary antibody was used in the secondary only control (shown on the inset). For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-Arginine, and Sodium Azide (<u>ab8226</u>).

IHC image of <u>ab8226</u> staining beta Actin in rat colon formalin fixed paraffin embedded tissue sections, performed on a Leica Bond. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with <u>ab8226</u>, 0.5µg/ml working concentration, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. No primary antibody was used in the secondary only control (shown on the inset). For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-Arginine, and Sodium Azide (<u>ab8226</u>).

#### 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 <u>https://www.abcam.cn/abpromise</u> or contact our technical team.

#### **Terms and conditions**

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