abcam

Product datasheet

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

★★★★★ 4 Abreviews 1 References 画像数 3

製品の概要

免疫原

製品名 Anti-beta Actin antibody [mAbcam 8226] - BSA and Azide free

製品の詳細 Mouse monoclonal [mAbcam 8226] to beta Actin - BSA and Azide free

由来種 Mouse

特異性 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.

アプリケーション 適用あり: WB, ICC/IF, IHC-P

種交差性 交差種: Mouse, Rat, Human

交差が予測される動物種: Sheep, Rabbit, Horse, Chicken, Guinea pig, Cow, Dog, Pig, Monkey,

Zebrafish, African green monkey, Chinese hamster, Armenian hamster

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

(Peptide available as ab13772)

ポジティブ・コントロール 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.

特記事項 ab264083 is the carrier-free version of ab8226.

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 ab8224 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

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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[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] 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

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 +4°C. Do

Not Freeze.

バッファー pH: 7.40

Constituent: PBS

キャリア・フリー はい

精製度 Protein G purified

ポリ/モノ モノクローナル

クローン名 mAbcam 8226

₹I□-**₹** Sp2/0-Ag14

アイソタイプ lgG1 **軽鎖の種類** kappa

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab264083の使用に適用されます 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	★★★★ (3)	1/500 - 1/10000. Predicted molecular weight: 42 kDa.Can be blocked with <u>Human beta Actin peptide (ab13772)</u> . 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.
ICC/IF		Use a concentration of 5 µg/ml.

アプリケーション	Abreviews	特記事項
IHC-P		Use a concentration of 0.1 - 0.5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

ターゲット情報

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

ubiquitously expressed in all eukaryotic cells.

関連疾患 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.

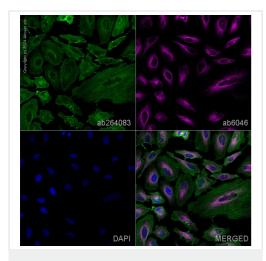
配列類似性 Belongs to the actin family.

翻訳後修飾 ISGylated.

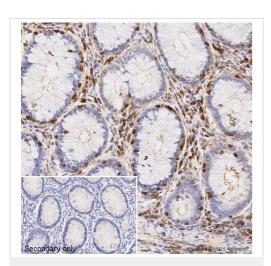
細胞内局在 Cytoplasm > cytoskeleton. Localized in cytoplasmic mRNP granules containing untranslated

mRNAs.

画像



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® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150080, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 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.

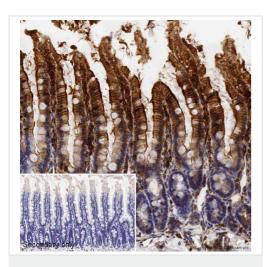


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta Actin antibody
[mAbcam 8226] - BSA and Azide free (ab264083)

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 (ab8226).



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 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 (ab8226).

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