abcam

Product datasheet

Anti-AMPK alpha 1 antibody [2B7] ab110036



14 References 画像数 7

製品の概要

製品名 Anti-AMPK alpha 1 antibody [2B7]

製品の詳細 Mouse monoclonal [2B7] to AMPK alpha 1

由来種 Mouse

アプリケーション 適用あり: WB, ICC/IF, ELISA, IHC-P, Flow Cyt

種交差性 交差種: Mouse, Rat, Human, African green monkey

免疫原 Purified recombinant fragment of Human AMPK alpha 1 expressed in E. Coli.

ポジティブ・コントロール Jurkat, HeLa, HepG2, MCF-7, Cos7, NIH3T3, K562, HEK293 and PC-12 cell lysates. Ovarian

cancer and brain tissues. NTERA-2 and PC-2 cells WB: RAW 264.7, Mouse Liver, Neuro2A cell

lysate.

特記事項

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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

パッファー Preservative: 0.05% Sodium azide

Constituent: PBS

精製度 Protein G purified

特記事項(精製) Purified from tissue culture supernatant.

ポリ/モノ モノクローナル

クローン名 2B7 **アイソタイプ** IgG1

1

Abpromise保証は、次のテスト済みアプリケーションにおけるab110036の使用に適用されます The Abpromise guarantee 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		1/500 - 1/2000. Predicted molecular weight: 64 kDa.
ICC/IF		1/200 - 1/1000.
ELISA		1/10000.
IHC-P		1/200 - 1/1000.
Flow Cyt		1/200 - 1/1000. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

ターゲット情報

継能	Reenoneih

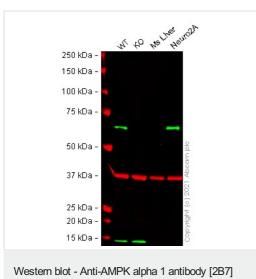
Responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It also regulates cholesterol synthesis via phosphorylation and inactivation of hormone-sensitive lipase and hydroxymethylglutaryl-CoA reductase. Appears to act as a metabolic stress-sensing protein kinase switching off biosynthetic pathways when cellular ATP levels are depleted and when 5'-AMP rises in response to fuel limitation and/or hypoxia. This is a catalytic subunit.

配列類似性

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily.

Contains 1 protein kinase domain.

画像



(ab110036)

All lanes: Anti-AMPK alpha 1 antibody [2B7] (ab110036) at 1/500 dilution

Lane 1: Wild-type RAW 264.7 cell lysate

Lane 2: PRKAA1 knockout RAW 264.7 cell lysate

Lane 3: Mouse Liver cell lysate

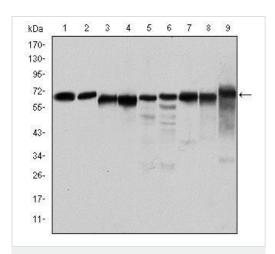
Lane 4: Neuro2A cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 64 kDa Observed band size: 64 kDa

False colour image of Western blot: Anti-AMPK alpha 1 antibody [2B7] staining at 1/500 dilution, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] (ab181602) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab110036 was shown to bind specifically to AMPK alpha 1. A band was observed at 64 kDa in wild-type RAW 264.7 cell lysates with no signal observed at this size in PRKAA1 knockout cell line ab280055 (knockout cell lysate ab280114). To generate this image, wild-type and PRKAA1 knockout RAW 264.7 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit lgG H&L (IRDye® 680RD) preabsorbed (ab216777) at 1/20000 dilution.



Western blot - Anti-AMPK alpha 1 antibody [2B7] (ab110036)

All lanes : Anti-AMPK alpha 1 antibody [2B7] (ab110036) at 1/500 dilution

Lane 1: Jurkat cell lysate.

Lane 2: HeLa cell lysate.

Lane 3: HepG2 cell lysate.

Lane 4: MCF-7 cell lysate.

Lane 5: Cos7 cell lysate.

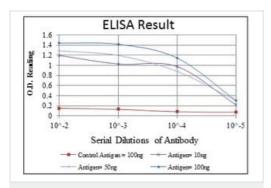
Lane 6: NIH3T3 cell lysate.

Lane 7: K562 cell lysate.

Lane 8: HEK293 cell lysate.

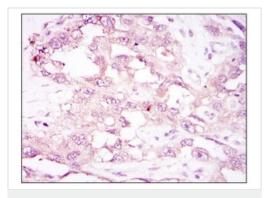
Lane 9: PC-12 cell lysate.

Predicted band size: 64 kDa **Observed band size:** 64 kDa



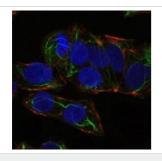
ELISA - Anti-AMPK alpha 1 antibody [2B7] (ab110036)

The proposed dilution of ab110036 is 1/10000.

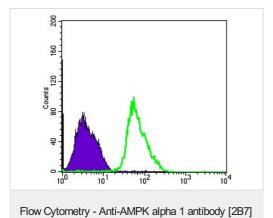


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-AMPK alpha 1 antibody [2B7] (ab110036)

ab110036 at 1/200 dilution staining AMPK alpha 1 in paraffinembedded ovarian cancer by Immunohistochemistry.

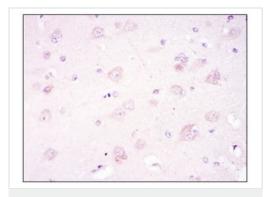


Immunocytochemistry/ Immunofluorescence - Anti-AMPK alpha 1 antibody [2B7] (ab110036) ab110036 at 1/200 dilution staining AMPK alpha 1 in NTERA-2 cells (green) by Immunofluorescence. The nuclei are stained with DRAQ5 fluorescent DNA dye (blue) and the Actin filaments have been labeled with Alexa Fluor-555 phalloidin (red).



(ab110036)

ab110036 used in Flow cytometric analysis of PC-2 cells (green). The negative control is indicated in purple.



ab110036 at 1/200 dilution staining AMPK alpha 1 in paraffinembedded brain tissues by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-AMPK alpha 1 antibody [2B7] (ab110036)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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 https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

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