abcam

Product datasheet

Anti-AMPK beta 1 antibody [Y367] - BSA and Azide free ab239804

敲除验证 重组 RabMAb

7 图像

概述

产品名称	Anti-AMPK beta 1抗体[Y367] - BSA and Azide free
描述	兔单克隆抗体[Y367] to AMPK beta 1 - BSA and Azide free
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), IP, ICC/IF, WB, IHC-P
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
常规说明	ab239804 is the carrier-free version of **ab32112**.

Our **carrier-free** 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® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2 Constituent: PBS
无载体	**是**
纯度	Protein A purified
克隆	单克隆
克隆编号	Y367
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab239804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。

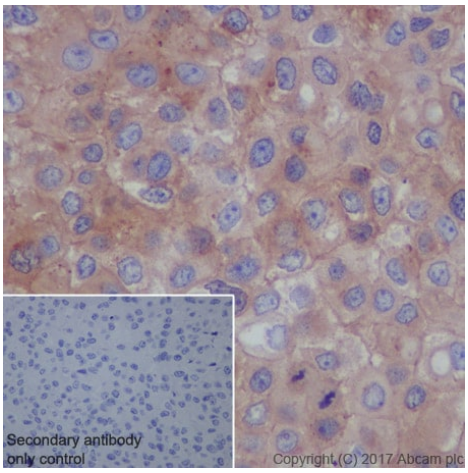
应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 30 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. This antibody may not be suitable for IHC with mouse or rat samples.

靶标

功能 Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges

	alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or PRKAG3).
序列相似性	Belongs to the 5'-AMP-activated protein kinase beta subunit family.
结构域	The glycogen-binding domain may target AMPK to glycogen so that other factors like glycogen-bound debranching enzyme or protein phosphatases can directly affect AMPK activity.
翻译后修饰	Phosphorylated when associated with the catalytic subunit (PRKAA1 or PRKAA2). Phosphorylated by ULK1; leading to negatively regulate AMPK activity and suggesting the existence of a regulatory feedback loop between ULK1 and AMPK.

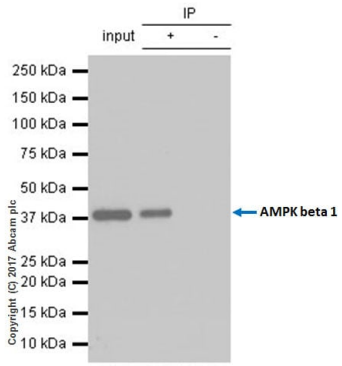
图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMPK beta 1 antibody [Y367] - BSA and Azide free (ab239804)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human bladder carcinoma tissue sections labeling AMPK beta 1 with purified **ab32112** at 1:1000 dilution (0.85 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, pH9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32112**).



Immunoprecipitation - Anti-AMPK beta 1 antibody [Y367] - BSA and Azide free (ab239804)

ab32112 (purified) at 1:40 dilution (2ug) immunoprecipitating AMPK beta 1 in NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates.

Lane 1 (input): NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates 10ug

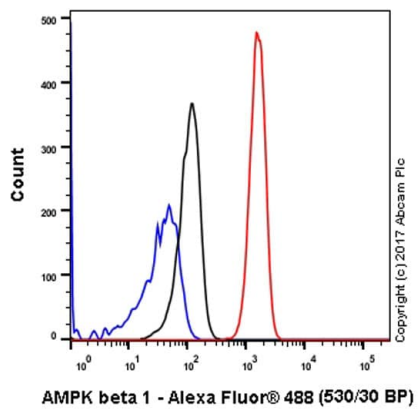
Lane 2 (+): ab32112 & NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab32112** in NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

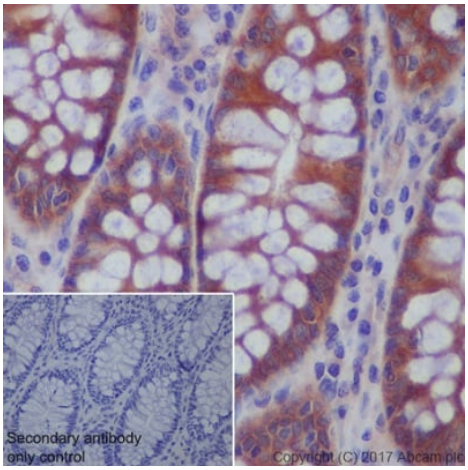
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32112**).



Flow Cytometry (Intracellular) - Anti-AMPK beta 1 antibody [Y367] - BSA and Azide free (ab239804)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling AMPK beta 1 with purified **ab32112** at 1/800 dilution (1 ug/ml) (red). Cells were fixed with 80% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - 0.1% Tween-20. Unlabeled control - Rabbit monoclonal IgG (Black).

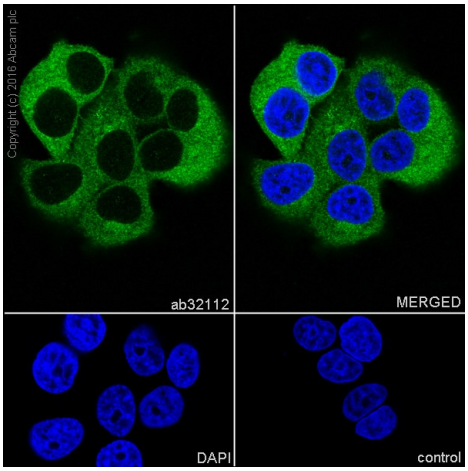
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32112**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMPK beta 1 antibody [Y367] - BSA and Azide free (ab239804)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human colon tissue sections labeling AMPK beta 1 with purified **ab32112** at 1:1000 dilution (0.85 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, pH9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32112**).

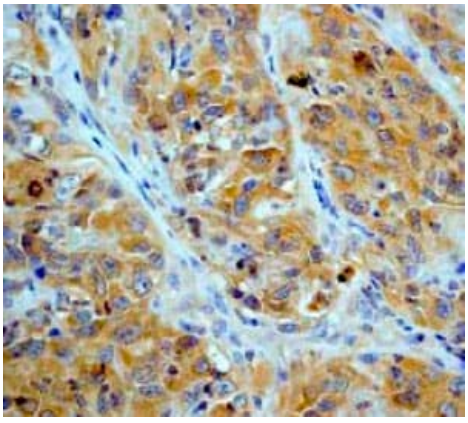


Immunocytochemistry/ Immunofluorescence - Anti-AMPK beta 1 antibody [Y367] - BSA and Azide free (ab239804)

Immunocytochemistry/Immunofluorescence analysis of MCF-7 cells labelling AMPK beta 1 with purified **ab32112** at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (**ab150077**) at 1/1000 dilution was used as the secondary antibody. Nuclei counterstained with DAPI (blue).

Secondary Only Control: PBS was used instead of the primary antibody as the negative control.

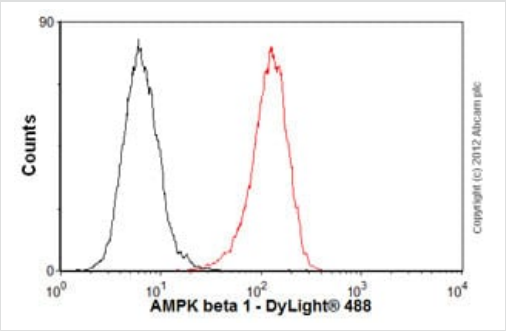
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32112**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMPK beta 1 antibody [Y367] - BSA and Azide free (ab239804)

Unpurified **ab32112** at a 1:100 dilution staining AMPK beta 1 in human lung carcinoma, using Immunohistochemistry, Paraffin Embedded Tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32112**).



Flow Cytometry (Intracellular) - Anti-AMPK beta 1 antibody [Y367] - BSA and Azide free (ab239804)

Overlay histogram showing HeLa cells stained with unpurified **ab32112** (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (**ab32112**, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monclonal) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32112**).