

Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EPR19693] ab183957

敲除验证 重组 RabMAb

[1 References](#) [5 图像](#)

概述

产品名称	Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA抗体[EPR19693]
描述	兔单克隆抗体[EPR19693] to PI 3 Kinase catalytic subunit alpha/PIK3CA
宿主	Rabbit
经测试应用	适用于: WB, IP
种属反应性	与反应: Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: F9 and M1 whole cell lysates; Mouse hypothalamus and fetal brain lysates; P0 Rat brain lysate. IP: Mouse hypothalamus lysate.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR19693

同种型

IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab183957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		1/1000. Detects a band of approximately 110 kDa (predicted molecular weight: 124 kDa).
IP		1/30.

靶标

功能

Phosphorylates PtdIns, PtdIns4P and PtdIns(4,5)P2 with a preference for PtdIns(4,5)P2.

疾病相关

Defects in PIK3CA are associated with colorectal cancer (CRC) [MIM:114500].

Defects in PIK3CA are a cause of susceptibility to breast cancer (BC) [MIM:114480]. A common malignancy originating from breast epithelial tissue. Breast neoplasms can be distinguished by their histologic pattern. Invasive ductal carcinoma is by far the most common type. Breast cancer is etiologically and genetically heterogeneous. Important genetic factors have been indicated by familial occurrence and bilateral involvement. Mutations at more than one locus can be involved in different families or even in the same case.

Defects in PIK3CA are a cause of susceptibility to ovarian cancer (OC) [MIM:167000]. Ovarian cancer common malignancy originating from ovarian tissue. Although many histologic types of ovarian neoplasms have been described, epithelial ovarian carcinoma is the most common form. Ovarian cancers are often asymptomatic and the recognized signs and symptoms, even of late-stage disease, are vague. Consequently, most patients are diagnosed with advanced disease.

Defects in PIK3CA may underlie hepatocellular carcinoma (HCC) [MIM:114550].

Defects in PIK3CA are a cause of keratosis seborrheic (KERSEB) [MIM:182000]. A common benign skin tumor. Seborrheic keratoses usually begin with the appearance of one or more sharply defined, light brown, flat macules. The lesions may be sparse or numerous. As they initially grow, they develop a velvety to finely verrucous surface, followed by an uneven warty surface with multiple plugged follicles and a dull or lackluster appearance.

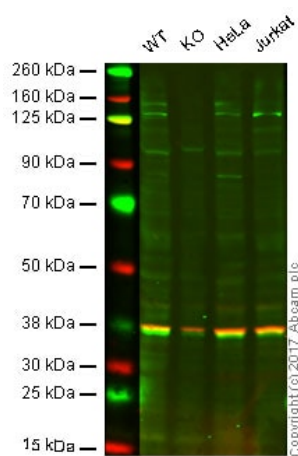
序列相似性

Belongs to the PI3/P14-kinase family.

Contains 1 C2 domain.

Contains 1 PI3K/PI4K domain.

图片



Western blot - Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EPR19693] (ab183957)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

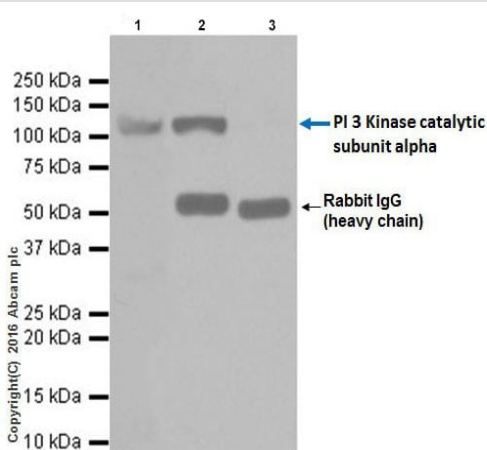
Lane 2: PI 3 Kinase catalytic subunit alpha/PIK3CA knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: Jurkat whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab183957 observed at 125 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab183957 was shown to recognize PI 3 Kinase catalytic subunit alpha/PIK3CA in wild type cells as signal was lost at the expected MW in PI 3 Kinase catalytic subunit alpha/PIK3CA knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and PI 3 Kinase catalytic subunit alpha/PIK3CA knockout samples were subjected to SDS-PAGE. ab183957 and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EPR19693] (ab183957)

PI 3 Kinase catalytic subunit alpha/PIK3CA was

immunoprecipitated from 0.35 mg of mouse hypothalamus lysate with ab183957 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab183957 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

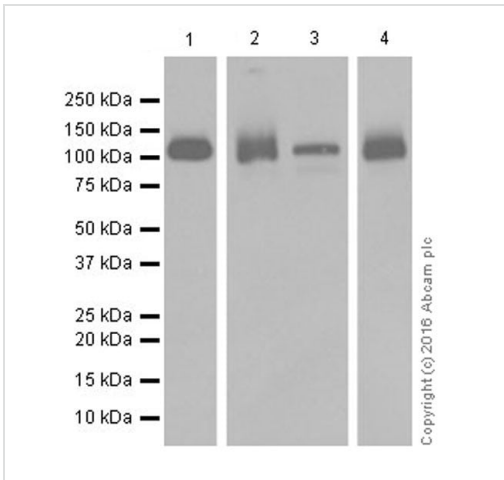
Lane 1: Mouse hypothalamus lysate, 10µg (Input).

Lane 2: ab183957 IP in mouse hypothalamus lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab183957 in mouse hypothalamus lysate.

Blocking and dilution buffer and concentration: 5% NFD/MBST.

Exposure time: 3 minutes.



Western blot - Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EPR19693] (ab183957)

All lanes : Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EPR19693] (ab183957) at 1/1000 dilution

Lane 1 : F9 (Mouse embryonic testicular cancer cell line) whole cell lysate

Lane 2 : M1 (Mouse myeloblast myeloid leukemia cell line) whole cell lysate

Lane 3 : Mouse hypothalamus lysate

Lane 4 : Mouse fetal brain lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

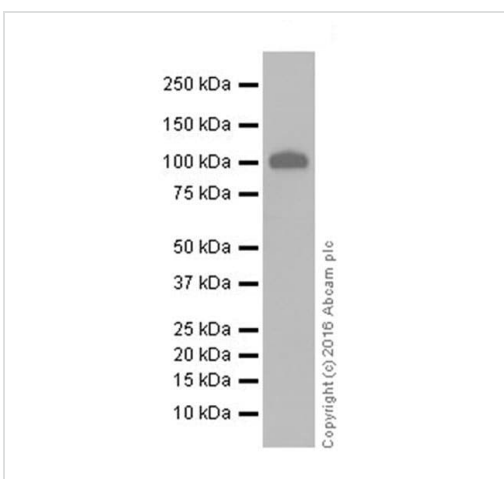
Predicted band size: 124 kDa

Observed band size: 110 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1: 3 minutes; Lane 2 and 3: 5 seconds; Lane 4: 3 seconds.

The observed molecular weight is consistent with what has been described in the literature (PMID: 19701705).



Western blot - Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EPR19693] (ab183957)

Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EPR19693] (ab183957) at 1/1000 dilution + P0 Rat brain lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 124 kDa

Observed band size: 110 kDa

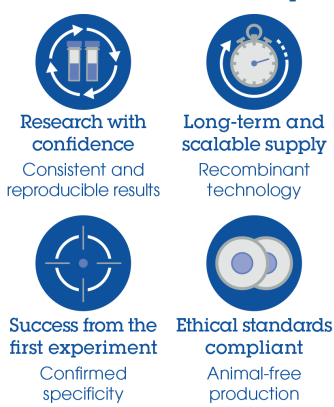
Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDm/TBST.

The observed molecular weight is consistent with what has been

described in the literature (PMID: 19701705).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EPR19693] (ab183957)

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