abcam

Product datasheet

Alexa Fluor® 488 Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EP383Y] ab202671

Recombinant

RabMAb

2 Images

Overview

Product name Alexa Fluor® 488 Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EP383Y]

Description Alexa Fluor® 488 Rabbit monoclonal [EP383Y] to PI3 Kinase catalytic subunit alpha/PIK3CA

Host species Rabbit

Conjugation Alexa Fluor® 488. Ex: 495nm, Em: 519nm

Tested applications
Suitable for: ICC/IF
Species reactivity
Reacts with: Human

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

Positive control ICC/IF: HeLa cells.

General notes

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or

outlicensing@thermofisher.com.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

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Stable for 12 months at -20°C. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Protein A purified

Clone number Monoclonal EP383Y

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab202671 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100.

Target

Function

Phosphorylates Ptdlns, Ptdlns4P and Ptdlns(4,5)P2 with a preference for Ptdlns(4,5)P2.

Involvement in disease

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 latestage 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.

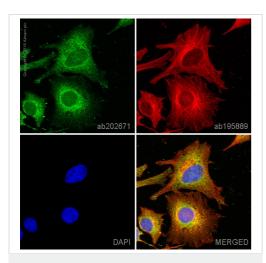
Sequence similarities

Belongs to the Pl3/Pl4-kinase family.

Contains 1 C2 domain.

Contains 1 PI3K/PI4K domain.

Images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-PI 3 Kinase catalytic subunit alpha/PIK3CA antibody [EP383Y] (ab202671)

ab202671 staining PI3 Kinase catalytic subunit alpha/PIK3CA in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% 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 ab202671 at 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 100% methanol (5 min).



alpha/PIK3CA antibody [EP383Y] (ab202671)

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