

Anti-RICTOR antibody [EPR22008] ab219950

KO VALIDATED Recombinant RabMAb

6 Images

Overview

Product name	Anti-RICTOR antibody [EPR22008]
Description	Rabbit monoclonal [EPR22008] to RICTOR
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HAP1, HeLa, HEK-293, HCT 116, MDA-MB-231, SW480 and PC-3 whole cell lysate. Flow Cyt (intra): HCT 116 and HeLa cells.
General notes	<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>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22008
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab219950 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
Flow Cyt (Intra)		1/500.
WB		1/1000. Detects a band of approximately 200 kDa (predicted molecular weight: 192 kDa).

Target

Function

Subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals. mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-422'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. Plays an essential role in embryonic growth and development.

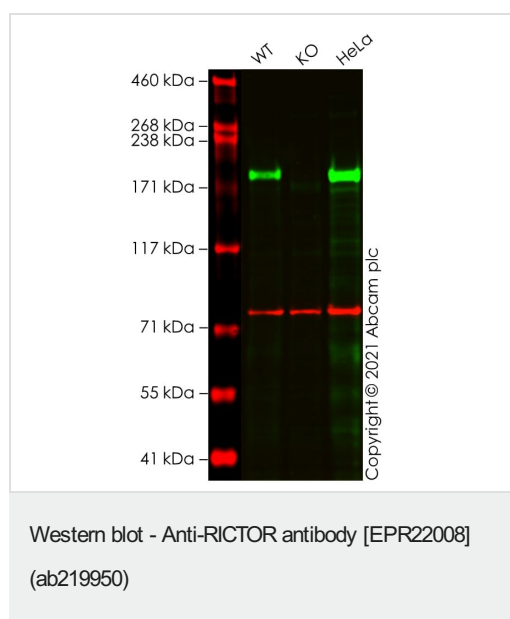
Sequence similarities

Belongs to the RICTOR family.

Post-translational modifications

Phosphorylated by MTOR; when part of mTORC2. Phosphorylated at Thr-1135 by RPS6KB1; phosphorylation of RICTOR inhibits mTORC2 and AKT1 signaling.

Images



All lanes : Anti-RICTOR antibody [EPR22008] (ab219950) at 1/1000 dilution

Lane 1 : Wild-type A549 cell lysate

Lane 2 : RICTOR knockout A549 cell lysate

Lane 3 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 192 kDa

Observed band size: 190 kDa

All lanes : Anti-RICTOR antibody [EPR22008] (ab219950) at 1/1000 dilution

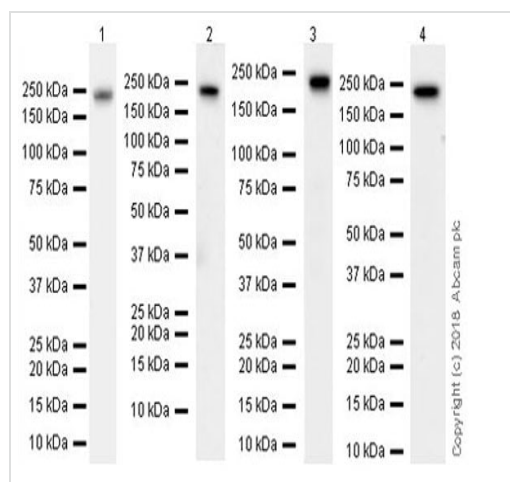
Lane 4 : HEK-293 (human epithelial cell line from embryonic kidney) whole cell lysate at 20 μ g

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

ab219950 was shown to specifically react with RICTOR in wild-type HAP1 cells as signal was lost in RICTOR knockout cells. Wild-type and RICTOR knockout samples were subjected to SDS-PAGE. ab219950 and **ab181602** (Rabbit anti-GAPDH loading control)



were incubated 1 hour at room temperature at 1/1000 dilution and 1/200,000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) secondary antibody at 1/50,000 dilution for 1 hour at room temperature before imaging. The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument using the ECL technique.



Western blot - Anti-RICTOR antibody [EPR22008] (ab219950)

All lanes : Anti-RICTOR antibody [EPR22008] (ab219950) at 1/1000 dilution

Lane 1 : HCT 116 (Human colorectal carcinoma cell line) whole cell lysate

Lane 2 : MDA-MB-231 (Human breast adenocarcinoma cell line) whole cell lysate

Lane 3 : SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate

Lane 4 : PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

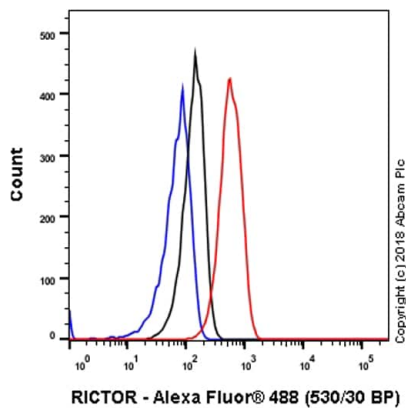
Lane 1 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Lanes 2-4 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Predicted band size: 192 kDa

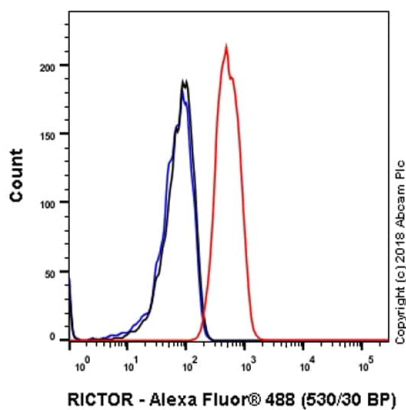
Blocking/Diluting buffer and concentration: 5% NFDM/TBST.

Exposure times: Lane 1: 3 minutes; Lane 2: 48 seconds; Lane 3-4: 26 seconds.



Flow Cytometry (Intracellular) - Anti-RICTOR
antibody [EPR22008] (ab219950)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling RICTOR with ab219950 at 1/500 (red) compared with a Rabbit monoclonal IgG (**ab172730**) (black) and an unlabeled control (cells incubated with secondary antibody only) (blue). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**), at 1/2000 dilution was used as the secondary antibody.



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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-RICTOR antibody [EPR22008] (ab219950)

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

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