abcam

Product datasheet

Anti-RICTOR antibody [7B3] ab104838

6 References 5 Images

Overview

Product name Anti-RICTOR antibody [7B3]

Description Mouse monoclonal [7B3] to RICTOR

Host species Mouse

Tested applications Suitable for: WB, IHC-P, Flow Cyt, ICC/IF

Species reactivity Reacts with: Mouse, Human

Immunogen Purified recombinant fragment of Human RICTOR expressed in E. Coli.

Positive control HeLa, PANC-1, MOLT4, HepG2 and HEK293 cell lysates. Thyroid gland tissues and Human

breast carcinoma. NIH3T3 cells.

General notesThis product was changed from ascites to supernatant. Lot no's high than GR173148-16 are from

Tissue Culture Supernatant

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

Properties

Form Liquid

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

Storage buffer Preservative: 0.05% Sodium azide

Constituent: PBS

Purity Protein G purified

Purification notes Purified from tissue culture supernatant.

Clonality Monoclonal

Clone number 7B3 lsotype lgG1

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Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab104838 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
WB		1/500 - 1/2000. Predicted molecular weight: 192 kDa.
IHC-P		1/200 - 1/1000.
Flow Cyt		Use at an assay dependent concentration. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		1/200 - 1/1000.

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.

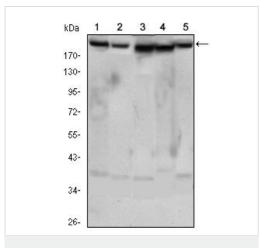
Sequence similarities

Post-translational modifications

Belongs to the RICTOR family.

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

Images



Western blot - Anti-RICTOR antibody [7B3] (ab104838)

All lanes : Anti-RICTOR antibody [7B3] (ab104838) at 1/500 dilution

Lane 1: HeLa cell lysate.

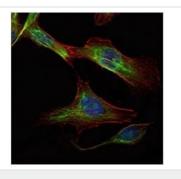
Lane 2: PANC-1 cell lysate.

Lane 3: MOLT4 cell lysate.

Lane 4: HepG2 cell lysate.

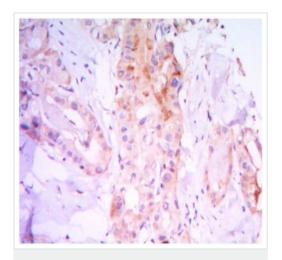
Lane 5: HEK293 cell lysate.

Predicted band size: 192 kDa



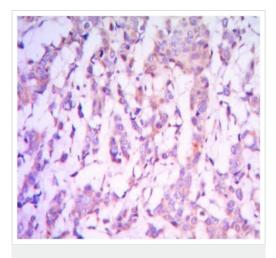
Immunocytochemistry/ Immunofluorescence - Anti-RICTOR antibody [7B3] (ab104838)

ab104838 at 1/200 dilution staining RICTOR in NIH3T3 cells (green) by immunofluorescence. DRAQ5 fluorescent DNA dye is shown in blue. Actin filaments have been labeled with Alexa Fluor-555 phalloidin (red).



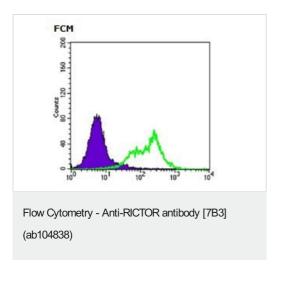
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RICTOR antibody [7B3] (ab104838)

ab104838 at 1/200 dilution staining RICTOR in paraffin-embedded thyroid gland tissues by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).



ab104838 at 1/200 dilution staining RICTOR in paraffin-fixed Human breast carcinoma by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).





ab104838 used for Flow cytometric analysis of HeLa cells (green). The negative control is shown in purple.

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