


Anti-mTOR antibody ab2833

★★★★★ [1 Abreviews](#) [15 References](#) [2 图像](#)

概述

产品名称	Anti-mTOR抗体
描述	兔多克隆抗体to mTOR
宿主	Rabbit
经测试应用	适用于: IP, WB
种属反应性	与反应: Human 预测可用于: Mouse, Rat 
免疫原	Synthetic peptide within Human mTOR aa 200-300. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. NP_004949.1 (GeneID 2475). Database link: P42345
阳性对照	WB: HeLa and HEK-293T whole cell lysate. IP: mTOR IP in HeLa whole cell lysate.
常规说明	<p>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.</p> <p>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</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7 Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab2833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
IP		Use at 2-10 µg/mg of lysate.
WB	★★★★☆ (1)	1/1000 - 1/5000. Detects a band of approximately 289 kDa (predicted molecular weight: 289 kDa).

靶标

功能

Kinase subunit of both mTORC1 and mTORC2, which regulates cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. Growth factor-stimulated mTORC1 activation involves AKT1-mediated phosphorylation of TSC1-TSC2, which leads to the activation of the RHEB GTPase that potentially activates the protein kinase activity of mTORC1. Amino-acid-signaling to mTORC1 requires its relocalization to the lysosomes mediated by the Ragulator complex and the Rag GTPases. Activated mTORC1 up-regulates protein synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis. mTORC1 phosphorylates EIF4EBP1 and releases it from inhibiting the elongation initiation factor 4E (eIF4E). mTORC1 phosphorylates and activates S6K1 at 'Thr-421', which then promotes protein synthesis by phosphorylating PDCD4 and targeting it for degradation. Phosphorylates MAF1 leading to attenuation of its RNA polymerase III-repressive function. mTORC2 is also activated by growth. factors, but 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'.

组织特异性

Expressed in numerous tissues, with highest levels in testis.

序列相似性

Belongs to the PI3/PI4-kinase family.

Contains 1 FAT domain.

Contains 1 FATC domain.

Contains 7 HEAT repeats.

Contains 1 PI3K/PI4K domain.

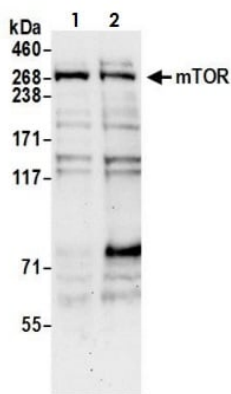
翻译后修饰

Autophosphorylated; when part of mTORC1 or mTORC2.

细胞定位

Endoplasmic reticulum membrane. Golgi apparatus membrane. Mitochondrion outer membrane. Lysosome. Cytoplasm. Nucleus > PML body. Shuttles between cytoplasm and nucleus. Accumulates in the nucleus in response to hypoxia (By similarity). Targeting to lysosomes depends on amino acid availability and RRAGA and RRAGB.

图片



Western blot - Anti-mTOR antibody (ab2833)

All lanes : Anti-mTOR antibody (ab2833) at 0.4 µg/ml

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

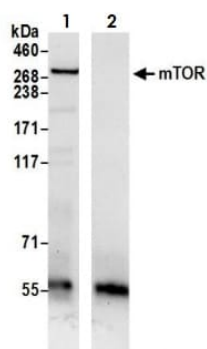
Lane 2 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lysates/proteins at 50 µg per lane.

Predicted band size: 289 kDa

Exposure time: 30 seconds

Lysates prepared using NETN lysis buffer.



Immunoprecipitation - Anti-mTOR antibody (ab2833)

Samples: Whole cell lysate (0.5 or 1.0 mg per IP reaction; 20% of IP loaded) from HeLa cells prepared using NETN lysis buffer.

Lane 1: ab2833 used for IP at 6 µg per reaction.

Lane 2: Control IgG.

For blotting immunoprecipitated mTOR, ab2833 was used at 1 µg/ml.

Detection: Chemiluminescence with an exposure time of 30 seconds.

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