


Anti-mTOR (phospho S2481) antibody [EPR427(N)] ab137133

重组 RabMAb

78 References 4 图像

概述

产品名称	Anti-mTOR (phospho S2481)抗体[EPR427(N)]
描述	兔单克隆抗体[EPR427(N)] to mTOR (phospho S2481)
宿主	Rabbit
经测试应用	适用于: WB, Dot blot 不适用于: Flow Cyt, ICC/IF, IHC-P or IP
种属反应性	与反应: Human 预测可用于: Mouse, Rat 
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HEK-293 and HeLa cell lysates.
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 -20°C.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR427(N)
同种型	IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab137133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 - 1/10000. Predicted molecular weight: 289 kDa.
Dot blot		1/1000.

应用说明

Is unsuitable for Flow Cyt, ICC/IF, IHC-P or IP.

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/P14-kinase family.

Contains 1 FAT domain.

Contains 1 FATC domain.

Contains 7 HEAT repeats.

Contains 1 PI3K/PI4K domain.

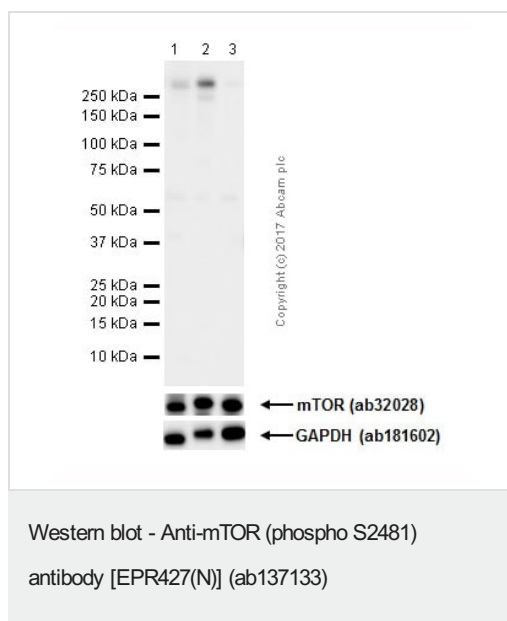
翻译后修饰

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



All lanes : Anti-mTOR (phospho S2481) antibody [EPR427(N)] (ab137133) at 1/1000 dilution (Purified)

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

Lane 2 : HeLa grown in serum-free media overnight, then treated with 200 nM PMA for 4 hours, whole cell lysate

Lane 3 : HeLa grown in serum-free media overnight, then treated with 200 nM PMA for 4 hours, whole cell lysate. Then the membrane was incubated with alkaline phosphatase.

Lysates/proteins at 10 µg per lane.

Secondary

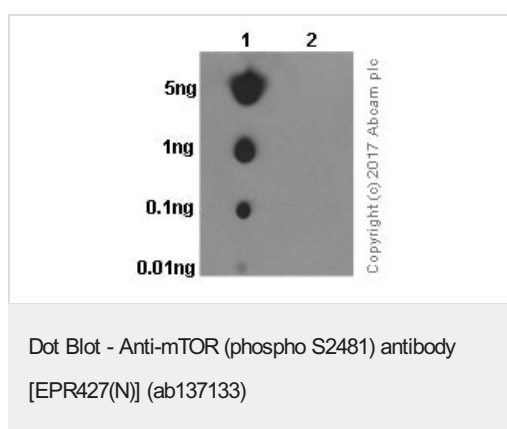
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 289 kDa

Observed band size: 289 kDa

Blocking Buffer: 5% NFDM/TBST

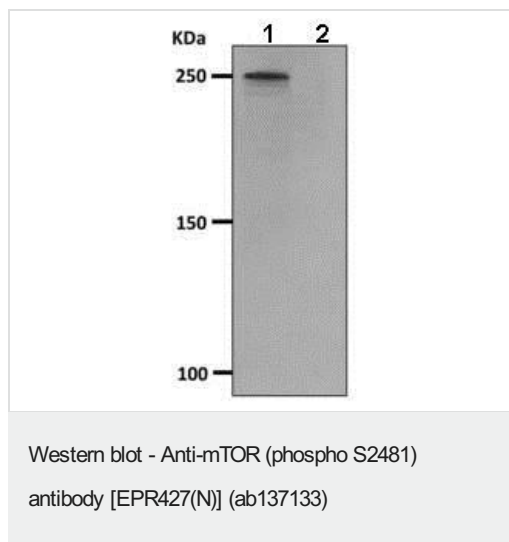
Diluting Buffer: 5% NFDM/TBST



Dot blot analysis of mTOR (phospho S2481) phospho peptide (Lane 1) and mTOR non-phospho peptide (Lane 2) labeling mTOR (phospho S2481) phospho peptide with purified ab137133 at a dilution of 1/1000 (1.21 µg/ml). A Goat Anti-Rabbit IgG (H+L) Peroxidase conjugated ([ab97051](#)) was used as the secondary antibody at a dilution of 1/20,000 dilution.

Blocking buffer: 5% NFDM/TBST

Diluting buffer: 5% NFDM /TBST



All lanes : Anti-mTOR (phospho S2481) antibody [EPR427(N)] (ab137133) at 1/1000 dilution

Lane 1 : HEK-293 (human epithelial cell line from embryonic kidney) cell lysate, untreated

Lane 2 : HEK-293 cell lysate, treated with Lambda Phosphatase

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 289 kDa

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-mTOR (phospho S2481) antibody [EPR427(N)] (ab137133)

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

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