abcam

Product datasheet

Anti-mTOR (phospho T2446) antibody ab63552

8 References 1 图像

概述

产品名称 Anti-mTOR (phospho T2446)抗体

描述 兔多克隆抗体to mTOR (phospho T2446)

宿主 Rabbit

经测试应用 适用于: WB

种属反应性 与反应: Mouse

免疫原 Synthetic peptide corresponding to Human mTOR (phospho T2446).

Database link: P42345

常规说明

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

Without Mg2+ and Ca2+

纯**度** Immunogen affinity purified

纯**化**说明 The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-

specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

克隆 多克隆

同种型 IgG

1

The Abpromise guarantee

Abpromise™承诺保证使用ab63552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		1/500 - 1/1000. 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 potently 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 Ill-repressive function. mTORC2 is also activated by growth. factors, but seems to be nutrientinsensitive. 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 Pl3/Pl4-kinase family.

Contains 1 FAT domain.
Contains 1 FATC domain.
Contains 7 HEAT repeats.
Contains 1 PI3K/PI4K domain.

翻译后修饰

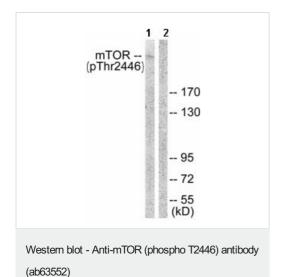
Autophosphorylated; when part of mTORC1 or mTORC2.

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 T2446) antibody (ab63552) at 1/500 dilution

Lane 1: extracts from NIH/3T3 cells, treated with Insulin (0.01U/ml, 15mins)

Lane 2: extracts from NIH/3T3 cells,

treated with Insulin (0.01U/ml, 15mins) with immunizing peptide at $10 \mu g$

Lysates/proteins at 30 µg per lane.

Predicted band size: 289 kDa **Observed band size:** 289 kDa

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