

# Anti-mTOR (phospho S2448) antibody ab1093

**22 References**   **2 图像**

### 概述

产品名称	Anti-mTOR (phospho S2448)抗体
描述	兔多克隆抗体to mTOR (phospho S2448)
宿主	Rabbit
经测试应用	适用于: IHC-P, WB
种属反应性	与反应: Human
免疫原	Synthetic peptide corresponding to Human mTOR aa 2400-2500 (C terminal) (phospho S2448). <a href="#">Run BLAST with</a> <a href="#">Run BLAST with</a>
阳性对照	WB: IGF-1 treated serum starved 293T whole cell lysate. IHC-P: Human kidney tissue, proximal convoluted tubules.
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&amp;As</p>

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 0.42% Potassium phosphate, 0.87% Sodium chloride
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ab1093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
IHC-P		Use a concentration of 5 µg/ml.
WB		1/1000. Detects a band of approximately 250 kDa (predicted molecular weight: 288 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.

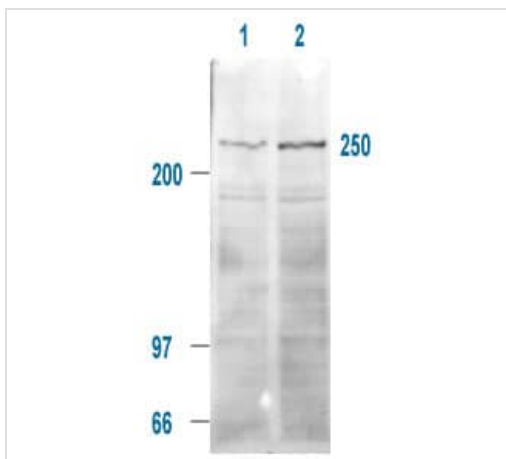
### 翻译后修饰

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 (phospho S2448) antibody (ab1093)

**All lanes :** Anti-mTOR (phospho S2448) antibody (ab1093) at 1/1000 dilution

**Lane 1 :** 24hr serum starved 293T whole cell lysate

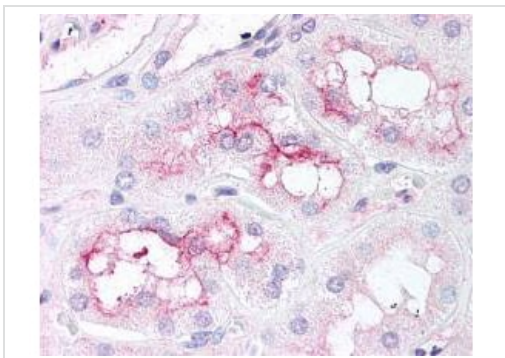
**Lane 2 :** 24hr serum starved 293T whole cell lysate, treated with IGF-1 (100 ng/ml) for 20 mins prior to harvest

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** HRP Goat-anti-Rabbit IgG at 1/2000 dilution

**Predicted band size:** 288 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-mTOR (phospho S2448) antibody (ab1093)

Formalin-fixed, paraffin-embedded human kidney tissue, (proximal convoluted tubules), labeling mTOR using ab1093 at 5 µg/ml (red). Counterstain is hematoxylin.

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

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