

## Product datasheet

# Anti-mTOR antibody (Agarose) ab19207

### 3 References

#### 概述

产品名称	Anti-mTOR抗体(Agarose)
描述	兔多克隆抗体to mTOR (Agarose)
宿主	Rabbit
偶联物	Agarose
经测试应用	适用于: IP
种属反应性	与反应: Rat, Human
免疫原	Synthetic peptide (Human)encoded in exons 5 and 6.
常规说明	There is 100ug of antibody per 200ul of agarose, and the agarose is supplied as a 50% slurry in a total of 400ul volume.

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C.
存储溶液	Preservative: 0.1% Sodium Azide Constituents: 0.1M Sodium chloride, 0.01M PBS, pH 7.2
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

#### 应用

Our [Abpromise guarantee](#) covers the use of **ab19207** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
IP		Use at an assay dependent dilution.

#### 图标

<b>功能</b>	<p>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 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'.</p>
<b>组织特异性</b>	Expressed in numerous tissues, with highest levels in testis.
<b>序列相似性</b>	<p>Belongs to the PI3/PI4-kinase family.</p> <p>Contains 1 FAT domain.</p> <p>Contains 1 FATC domain.</p> <p>Contains 7 HEAT repeats.</p> <p>Contains 1 PI3K/PI4K domain.</p>
<b>翻译后修饰</b>	Autophosphorylated; when part of mTORC1 or mTORC2.
<b>细胞定位</b>	<p>Endoplasmic reticulum membrane. Golgi apparatus membrane. Mitochondrion outer membrane. Lysosome. Cytoplasm. Nucleus &gt; PML body. Shuttles between cytoplasm and nucleus.</p> <p>Accumulates in the nucleus in response to hypoxia (By similarity). Targeting to lysosomes depends on amino acid availability and RRAGA and RRAGB.</p>

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors