

## mTOR (phospho Ser2448) Polyclonal Antibody

Catalog No: YP0176

**Reactivity:** Human; Mouse; Rat; Bovine; Pig

**Applications:** WB;IHC;IF;ELISA

Target: mTOR

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine resistance;>>ErbB

signaling pathway;>>HIF-1 signaling pathway;>>Phospholipase D signaling pathway;>>Autophagy - other;>>Autophagy - animal;>>mTOR signaling

pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Cellular

senescence;>>Apelin signaling pathway;>>Neutrophil extracellular trap

formation;>>JAK-STAT signaling pathway;>>Th17 cell

differentiation;>>Thermogenesis;>>Insulin signaling pathway;>>Thyroid hormone

signaling pathway;>>Adipocytokine signaling pathway;>>Type II diabetes mellitus;>>Insulin resistance;>>Growth hormone synthesis, secretion and action;>>Alzheimer disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Spinocerebellar ataxia;>>Pathways of neurodegeneration - multiple

diseases;>>Shigellosis;>>Human cytomegalovirus infection;>>Human papillomavirus infection:>>Kaposi sarcoma-associated herpesvirus

infection;>>He

Gene Name: MTOR

**Protein Name:** Serine/threonine-protein kinase mTOR

Q9JLN9

Human Gene Id: 2475

**Human Swiss Prot** P42345

No:

Mouse Gene Id: 56717

**Mouse Swiss Prot** 

No:

Rat Gene ld: 56718

Rat Swiss Prot No: P42346

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**Immunogen:** The antiserum was produced against synthesized peptide derived from human

mTOR around the phosphorylation site of Ser2448. AA range:2415-2464

**Specificity:** Phospho-mTOR (S2448) Polyclonal Antibody detects endogenous levels of

mTOR protein only when phosphorylated at S2448.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not

yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 289kD

**Cell Pathway:** Regulates Angiogenesis; Insulin Receptor; ErbB/HER; mTOR; B Cell Receptor;

PI3K/Akt; AMPK

**Background :** The protein encoded by this gene belongs to a family of phosphatidylinositol

kinase-related kinases. These kinases mediate cellular responses to stresses such as DNA damage and nutrient deprivation. This protein acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. The ANGPTL7 gene is located in an intron of this gene. [provided by

RefSeq, Sep 2008],

**Function:** function: Acts as the target for the cell-cycle arrest and immunosuppressive

effects of the FKBP12-rapamycin complex. Part of the TORC2 complex which plays a critical role in AKT1 Ser-473 phosphorylation, and may modulate the

phosphorylation of PKCA and regulate actin cytoskeleton

organization.,similarity:Belongs to the PI3/PI4-kinase family.,similarity:Contains 1 FAT domain.,similarity:Contains 1 FATC domain.,similarity:Contains 1 PI3K/PI4K

domain.,similarity:Contains 7 HEAT repeats.,subunit:Interacts with the

FKBP12-rapamycin complex. Binds UBQLN1. Forms part of the mammalian target of rapamycin 2 complex (TORC2) comprised of FRAP1, GBL, PRR5,

RICTOR and SIN. TORC2 does not bind to and is not sensitive to

FKBP12-rapamycin. Binds directly to PRR5 and RICTOR within the TORC2 complex., tissue specificity: Expressed in numerous tissues, with highest levels in

testis..



Subcellular Location:

**Modifications:** 

Phospho

Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side. Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side. Mitochondrion outer membrane; Peripheral membrane protein; Cytoplasmic side. Lysosome. Cytoplasm. Nucleus, PML body. Microsome membrane. Lysosome membrane. Cytoplasmic vesicle, phagosome. 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 (PubMed:18497260, PubMed:20381137). Lysosome targeting also depends on interaction with MEAK7. Translocates to the lysosome membrane in the presence of TM4SF5 (PubMed:30956113).

Expression:	Expressed in numerous tissues, with highest levels in testis.
Sort :	1
3011.	
No1 :	5536S
No2 :	2976L
No3:	ab109268
N. 4	
No4:	
Host:	Rabbit

## **Products Images**

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