

## mTOR (phospho Ser2448) (PT0498R) PT® Rabbit mAb

Catalog No: YM8326

**Reactivity:** Human; Mouse; Rat;

**Applications:** WB;IHC;IF;IP;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 Id**: 56718

Rat Swiss Prot No: P42346

1/4



**Specificity:** endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

**Source:** Monoclonal, rabbit, IgG, Kappa

**Dilution:** IHC 1:500-1:2000;WB 1:2000-1:10000;IF 1:200-1:1000;ELISA

1:5000-1:20000;IP 1:50-1:200;

Purification: Protein A

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

Molecularweight: 289kD

Observed Band: 250kD

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

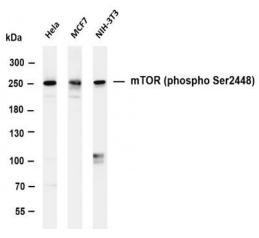
testis..

Subcellular Location :

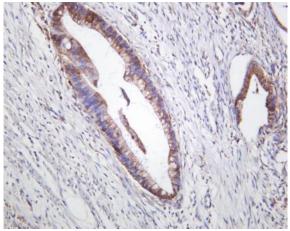
Cytoplasm

**Expression:** Expressed in numerous tissues, with highest levels in testis.

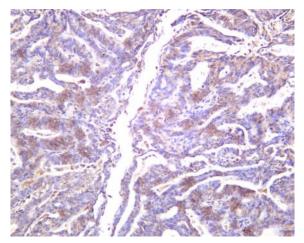
## **Products Images**



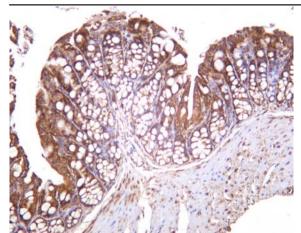
Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-mTOR (phospho Ser2448) (PT0498R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: MCF7 Lane 3: NIH-3T3 Predicted band size: 289kDa Observed band size: 250kDa



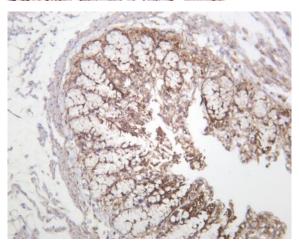
Human colon carcinoma was stained with anti-mTOR (phospho Ser2448) (PT0498R) rabbit antibody



Human endometrium carcinoma was stained with anti-mTOR (phospho Ser2448) (PT0498R) rabbit antibody



Mouse colon was stained with anti-mTOR (phospho Ser2448) (PT0498R) rabbit antibody



Rat colon was stained with anti-mTOR (phospho Ser2448) (PT0498R) rabbit antibody