



# mTOR Rabbit mAb

<b>Catalog No</b>	YP-rAb-17818
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat,Chicken,Bovine,Pig
<b>Applications</b>	WB,IHC,IF,IP,ELISA
<b>Gene Name</b>	MTOR
<b>Protein Name</b>	Serine/threonine-protein kinase mTOR
<b>Purification Process</b>	Protein A
<b>Specificity</b>	Endogenous
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	MTOR ; FRAP ; FRAP1 ; FRAP2 ; RAFT1 ; RAPT1 ; Serine/threonine-protein kinase mTOR ; FK506-binding protein 12-rapamycin complex-associated protein 1 ; FKBP12-rapamycin complex-associated protein ; Mammalian target of rapamycin ; mTOR ; Mechanistic tar
<b>Observed Band</b>	260kD
<b>Calculated Molecular Weight</b>	289kD
<b>Cell Pathway</b>	Cytoplasm
<b>Tissue Specificity</b>	Expressed in numerous tissues, with highest levels in testis.
<b>Function</b>	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.,

### Background

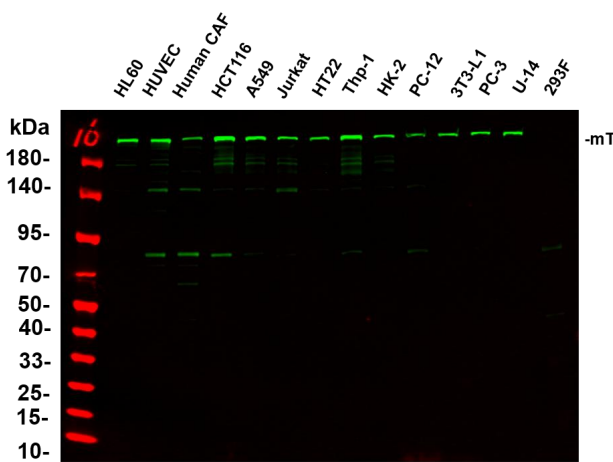
The protein encoded by this gene belongs to a family of phosphatidylinositol kinase-related kinases. These kinases mediate cellular responses to stresses such as DNA damage and nutrient deprivation. This protein acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. The ANGPTL7 gene is located in an intron of this gene. [provided by RefSeq, Sep 2008],

### matters needing attention

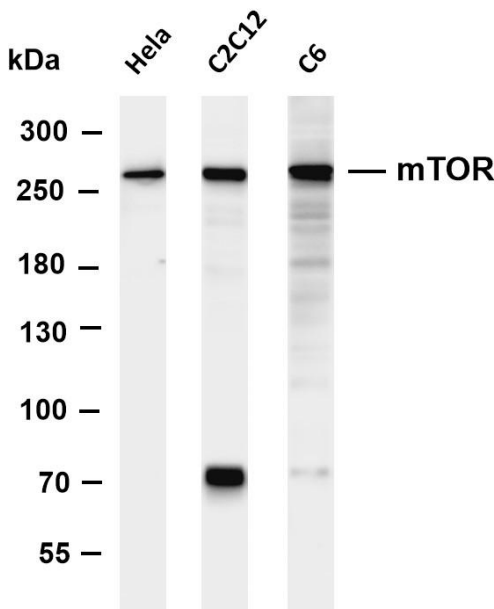
Avoid repeated freezing and thawing!

### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

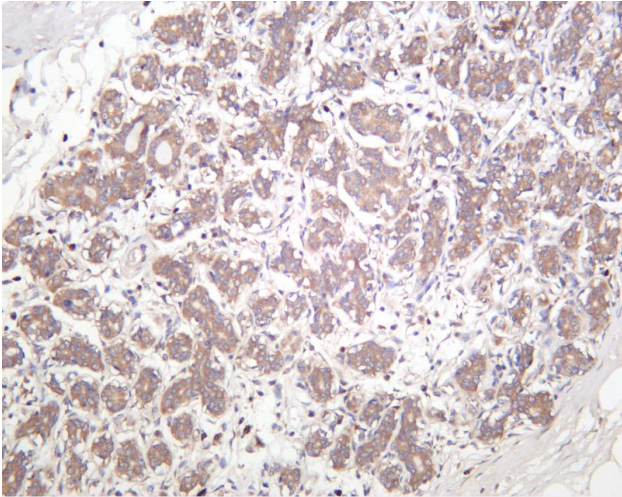


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody

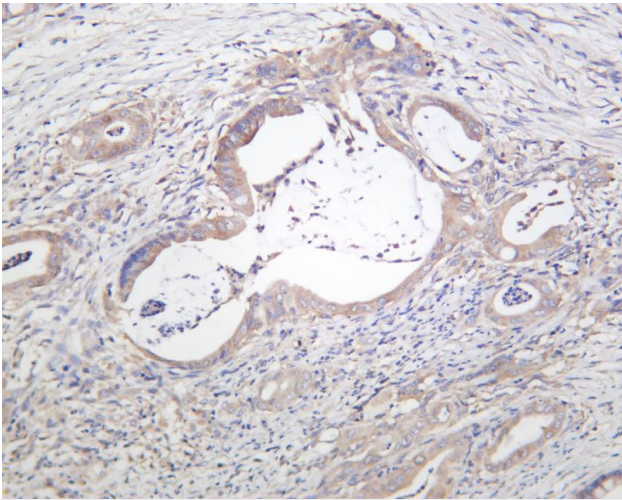


Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-mTOR antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: C2C12 Lane 4: C6 Predicted band size: 289kDa Observed band size: 260kDa

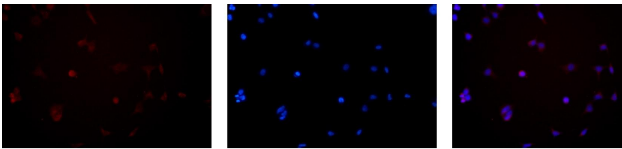




Human breast carcinoma was stained with anti-mTOR rabbit antibody



Human colon carcinoma was stained with anti-mTOR rabbit antibody



Immunofluorescence analysis of HEK293. Picture A: mTOR antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

A

B

C

