

For Research Use Only

# mTOR Recombinant antibody, PBS Only



Catalog Number: 81670-1-PBS

Featured Product

## Basic Information

Catalog Number:

81670-1-PBS

Size:

1 mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG28395

GenBank Accession Number:

NM\_004958

GeneID (NCBI):

2475

Full Name:

FK506 binding protein 12-rapamycin associated protein 1

Calculated MW:

289 kDa

Observed MW:

250-289 kDa

Purification Method:

Protein A purification

CloneNo.:

6H23

## Applications

Tested Applications:

WB,IP,Indirect ELISA,IHC,IF,FC

Species Specificity:

Human, Mouse, Rat

## Background Information

mTOR, also named as FRAP1, FRAP, FRAP2 and RAPT1, belongs to the PI3/PI4-kinase family. mTOR is a Ser/Thr protein kinase that functions as an ATP and amino acid sensor to balance nutrient availability and cell growth. mTOR is kinase subunit of both mTORC1 and mTORC2, which regulate cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. 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. mTOR is phosphorylated at Ser2448 via the PI3 kinase/Akt signaling pathway and autophosphorylated at Ser2481. mTOR plays a key role in cell growth and homeostasis and may be abnormally regulated in tumors.

## Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

For technical support and original validation data for this product please contact:

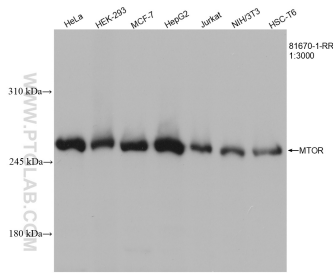
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

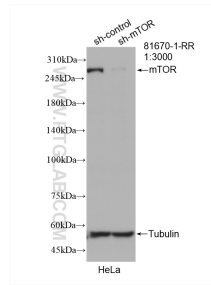
W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

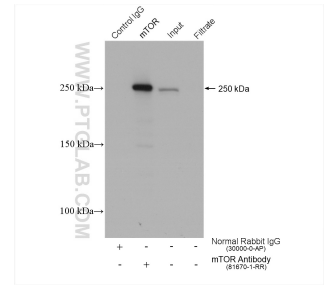
## Selected Validation Data



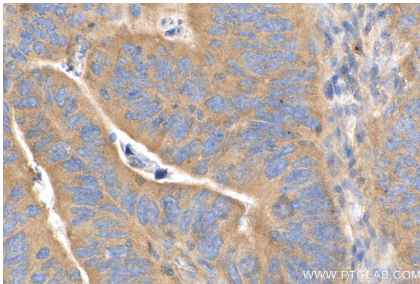
Various lysates were subjected to SDS PAGE followed by western blot with 81670-1-RR (mTOR antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81670-1-PBS in a different storage buffer formulation.



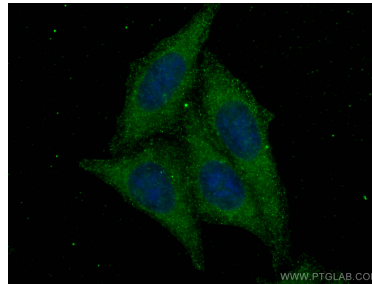
WB result of mTOR antibody (81670-1-RR; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-mTOR transfected HeLa cells. This data was developed using the same antibody clone with 81670-1-PBS in a different storage buffer formulation.



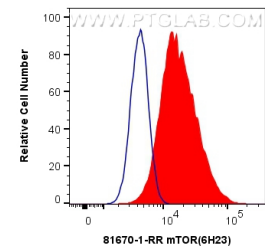
IP result of anti-mTOR (IP:81670-1-RR, 4ug; Detection:81670-1-RR 1:1000) with HeLa cells lysate 1760 ug. This data was developed using the same antibody clone with 81670-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81670-1-RR (mTOR antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81670-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using mTOR antibody (81670-1-RR, Clone: 6H23) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 81670-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human mTOR (81670-1-RR, Clone:6H23) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 81670-1-PBS in a different storage buffer formulation.