

# mTOR Rabbit pAb

Catalog No.: A2445

122 Publications

## Basic Information

**Observed MW**

289kDa

**Calculated MW**

289kDa

**Category**

Primary antibody

**Applications**

WB, IF/ICC, IP, ELISA

**Cross-Reactivity**

Human, Mouse, Rat

## 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 kinase is a component of two distinct complexes, mTORC1, which controls protein synthesis, cell growth and proliferation, and mTORC2, which is a regulator of the actin cytoskeleton, and promotes cell survival and cell cycle progression. This protein acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. Inhibitors of mTOR are used in organ transplants as immunosuppressants, and are being evaluated for their therapeutic potential in SARS-CoV-2 infections. Mutations in this gene are associated with Smith-Kingsmore syndrome and somatic focal cortical dysplasia type II. The ANGPTL7 gene is located in an intron of this gene.

## Recommended Dilutions

**WB** 1:1000 - 1:5000**IF/ICC** 1:50 - 1:200**IP** 0.5µg-4µg antibody for  
200µg-400µg extracts of  
whole cells**ELISA** Recommended starting  
concentration is 1 µg/mL.  
Please optimize the  
concentration based on  
your specific assay  
requirements.

## Contact

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## Immunogen Information

**Gene ID**

2475

**Swiss Prot**

P42345

**Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

**Synonyms**

SKS; FRAP; FRAP1; FRAP2; RAFT1; RAPT1; mTOR

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

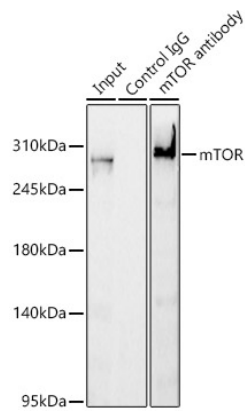
Affinity purification

**Storage**

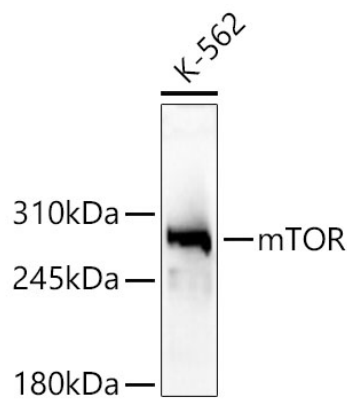
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

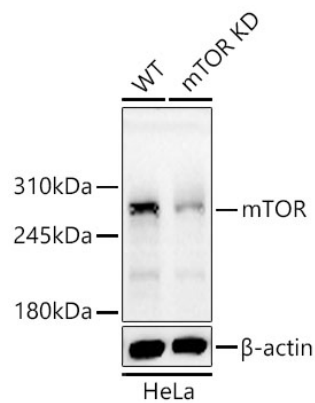
Validation Data



Immunoprecipitation analysis of 300ug extracts of K-562 cells using 3ug mTOR Rabbit pAb (A2445 1:70). Western blot was performed from the immunoprecipitate using mTOR Rabbit pAb (A2445) at a dilution of 1:500.



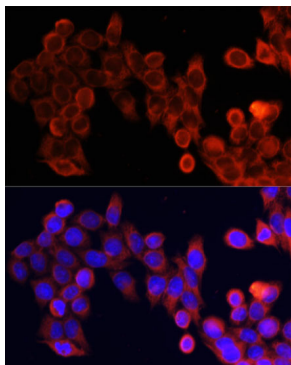
Western blot analysis of lysates from K-562 cells using mTOR Rabbit pAb (A2445) at 1:2000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 60s.



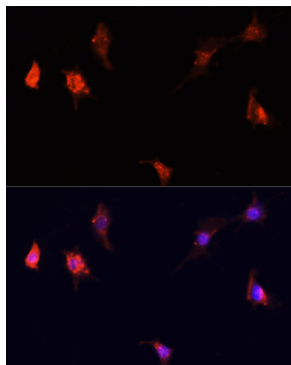
Western blot analysis of lysates from wild type (WT) and mTOR knockdown (KD) HeLa cells using mTOR Rabbit pAb (A2445) at 1:2000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 14 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 60s.

## Validation Data

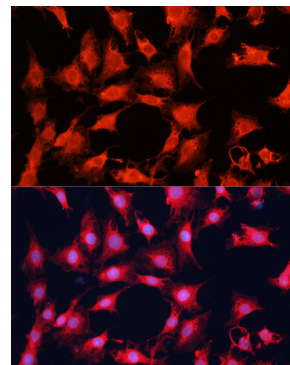
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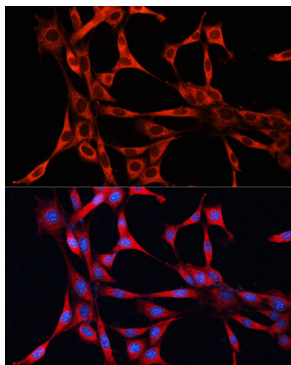
Immunofluorescence analysis of HeLa cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC12 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of C6 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.