

A2445

Leader in Biomolecular Solutions for Life Science



mTOR Rabbit pAb

Catalog No.: A2445

114 Publications

Basic Information

Observed MW

289kDa

Calculated MW

289kDa

Category

Polyclonal 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

 www.abclonal.com

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

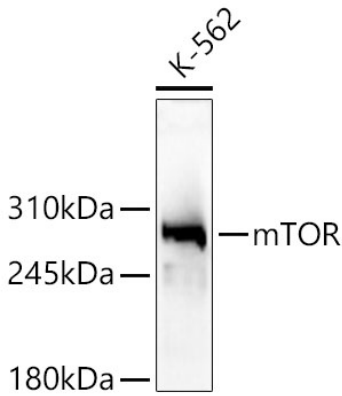
Affinity purification

Storage

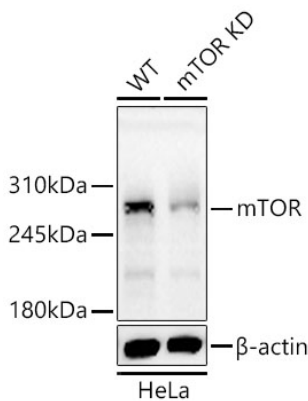
Store at -20°C. Avoid freeze / thaw cycles.

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

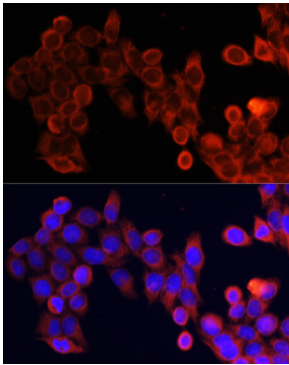
Validation Data



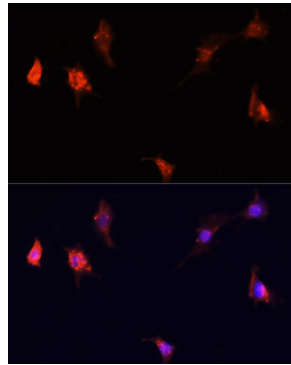
Western blot analysis of lysates from K-562 cells using mTOR Rabbit pAb (A2445) at 1:2000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).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



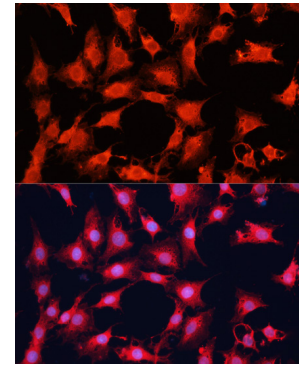
Western blot analysis of lysates from wild type (WT) and mTOR knockdown (KD) HeLa cells using mTOR Rabbit pAb (A2445) at 1:2000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 14 µg per lane.
Blocking buffer: 3% nonfat dry milk in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



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.

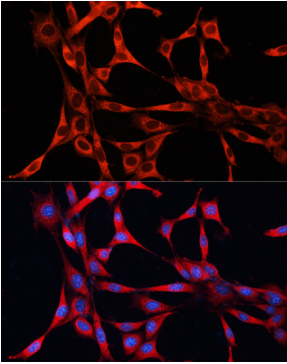


Immunofluorescence analysis of PC12 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

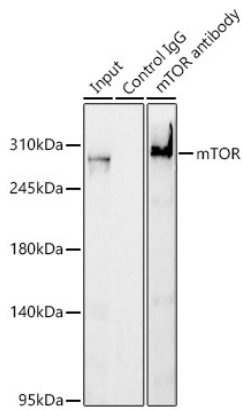


Immunofluorescence analysis of C6 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

Validation Data



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.



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.