

A2445

Leader in Biomolecular Solutions for Life Science



mTOR Rabbit pAb

Catalog No.: A2445 **98 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.

Immunogen Information

Gene ID

2475

Swiss Prot

P42345

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 of human mTOR (NP_004949.1).

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.

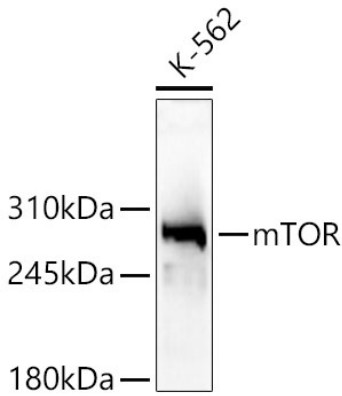
Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

Contact

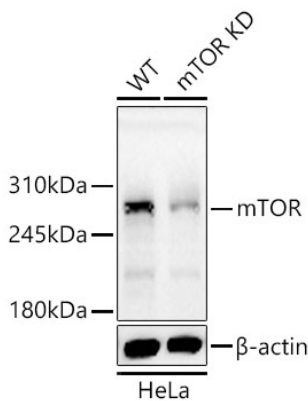


www.abclonal.com

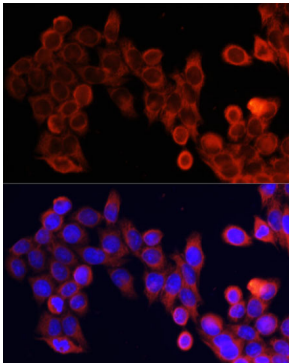
Validation Data



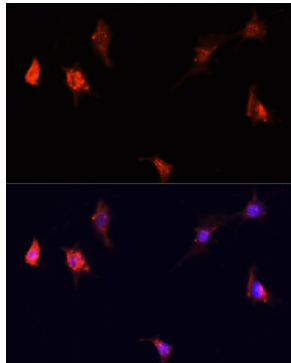
Western blot analysis of lysates from K-562 cells using mTOR Rabbit pAb (A2445) at 1:2000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).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



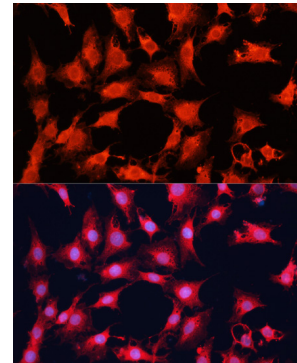
Western blot analysis of lysates from wild type (WT) and mTOR knockdown (KD) HeLa cells using mTOR Rabbit pAb (A2445) at 1:2000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 14 µg per lane.
Blocking buffer: 3% nonfat dry milk in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

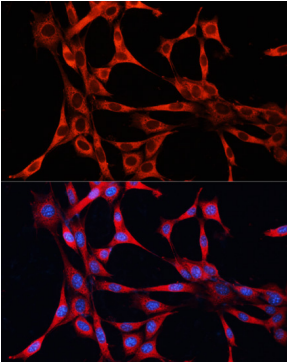


Immunofluorescence analysis of PC12 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

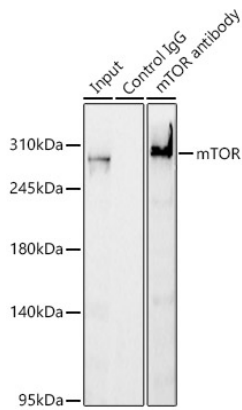


Immunofluorescence analysis of C6 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

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.