

A11355

Leader in Biomolecular Solutions for Life Science



mTOR Rabbit pAb

Catalog No.: A11355

20 Publications

Basic Information

Observed MW

289kDa

Calculated MW

289kDa

Category

Polyclonal Antibody

Applications

WB,IF/ICC,IP,ELISA

Cross-Reactivity

Human,Mouse

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 1:100 - 1:500

IF/ICC 1:50 - 1:200

IP 0.5µg-4µg antibody for
200µg-400µg extracts
of whole cells

Immunogen Information

Gene ID

2475

Swiss Prot

P42345

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 2400-2500 of human mTOR (NP_004949.1).

Synonyms

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

Contact

 www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

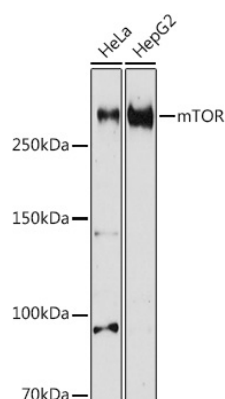
Affinity purification

Storage

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

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

Validation Data



Western blot analysis of various lysates using mTOR Rabbit pAb (A11355) at 1:500 dilution.

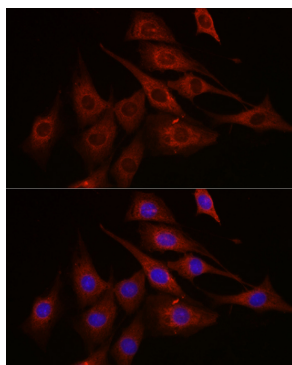
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

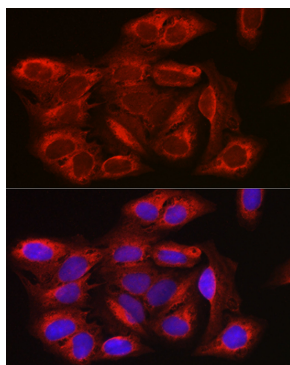
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 60s.



Immunofluorescence analysis of NIH-3T3 cells using mTOR Rabbit pAb (A11355) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using mTOR Rabbit pAb (A11355) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 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 (A11355 1:50). Western blot was performed from the immunoprecipitate using mTOR Rabbit pAb (A2445) at a dilution of 1:500.