A2445

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mTOR Rabbit pAb

Catalog No.: A2445 **83 Publications**

Basic Information

Observed MW
289kDa

Calculated MW
289kDa

Category
Mouse Monoclonal 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

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

Contact

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Product Information

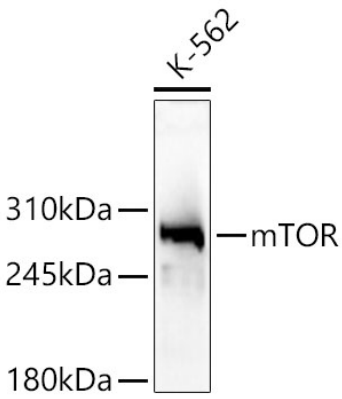
Source
Rabbit

Isotype
IgG

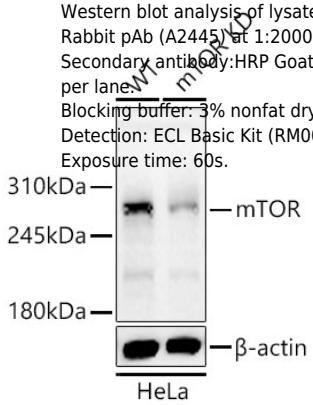
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

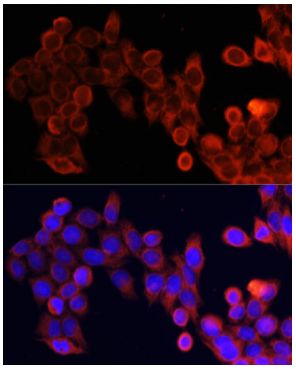
Validation Data



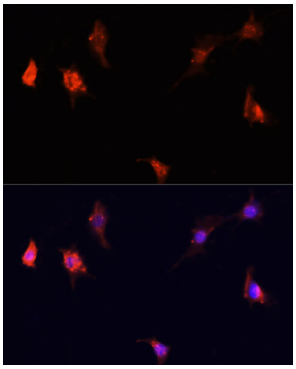
Western blot analysis of lysates from K-562 cells using mTOR Rabbit pAb(A2445) at 1:2000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure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



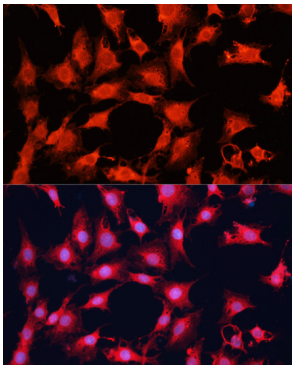
Western blot analysis of lysates from wild type (WT) and mTOR knockdown (KD) HeLa cells using mTOR Rabbit pAb (A2445) at 1:2000 dilution.
Secondary antibody:HRP Goat Anti-Rabbit IgG (H+L)(AS014) at 1:10000 dilution.Lysates/proteins: 14 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: 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 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

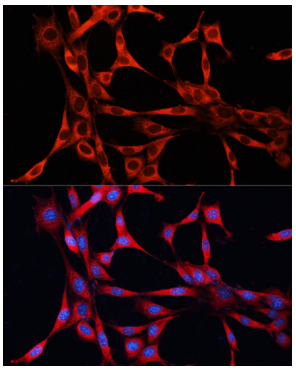


Immunofluorescence analysis of PC12 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

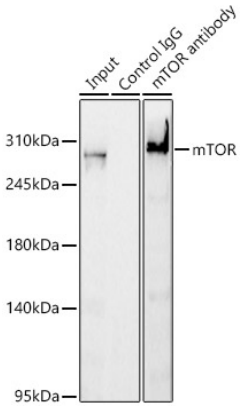


Immunofluorescence analysis of C6 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

Validation Data



Immunofluorescence analysis of NIH/3T3 cells using mTOR Rabbit pAb (A2445) at dilution of 1:100. Secondary antibody: Cy3 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 dilition of 1:500.