

A25581

Leader in Biomolecular Solutions for Life Science



mTOR Rabbit mAb

Catalog No.: A25581 **Recombinant**

Basic Information

Observed MW

289kDa

Calculated MW

289kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

ARC63981

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
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200

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

FRAP; FRAP1; FRAP2; RAFT1; RAPT1

Contact



www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

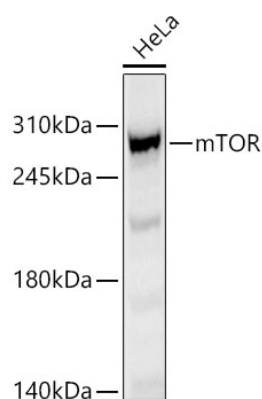
Affinity purification

Storage

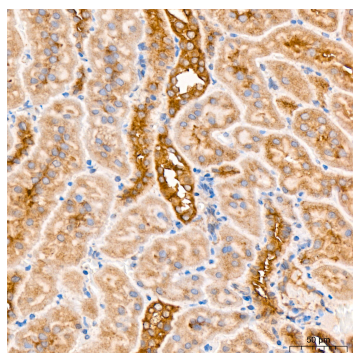
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

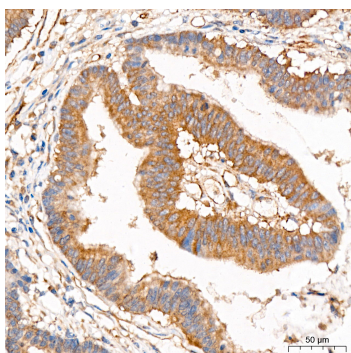
Validation Data



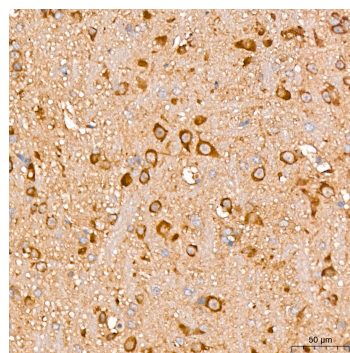
Western blot analysis of lysates from HeLa cells using mTOR Rabbit mAb(A25581) at 1:3000 dilution. Secondary antibody:HRP Goat Anti-Rabbit IgG (H+L)(AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection:ECL Basic Kit (RM00020). Exposure time:20s.



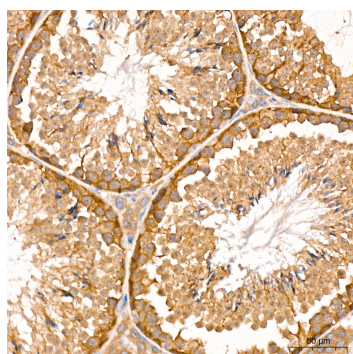
Immunohistochemistry analysis of mTOR in paraffin-embedded Rat kidney tissue using mTOR Rabbit mAb (A25581) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



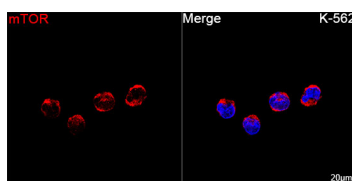
Immunohistochemistry analysis of mTOR in paraffin-embedded Human colon carcinoma tissue using mTOR Rabbit mAb (A25581) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of mTOR in paraffin-embedded Mouse brain tissue using mTOR Rabbit mAb (A25581) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of mTOR in paraffin-embedded Mouse testis tissue using mTOR Rabbit mAb (A25581) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Confocal imaging of K-562 cells using mTOR Rabbit mAb (A25581, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.