AP1413

Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Phospho-mTOR-S2448 Rabbit mAb

Catalog No.: AP1413 Recombinant

Basic Information

Observed MW
310kDa/289kDa

Calculated MW
289kDa

Category
SMab Recombinant Monoclonal Antibody

Applications
WB,IF/ICC,ELISA

Cross-Reactivity
Human,Mouse,Rat

CloneNo number
ARC59819

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	1:500 - 1:1000
IF/ICC	1:100-1:500ELISA

Immunogen Information

Gene ID
2475

Swiss Prot
P42345

Immunogen
Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms
SKS; FRAP; FRAP1; FRAP2; RAFT1; RAPT1; Phospho-mTOR-S2448

Contact

www.abclonal.com

Product Information

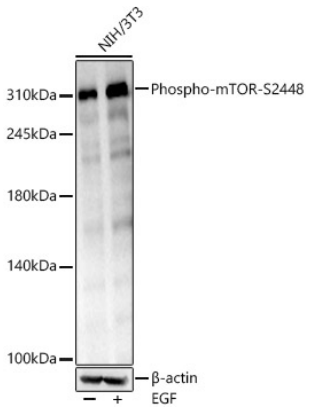
Source
Rabbit

Isotype
IgG

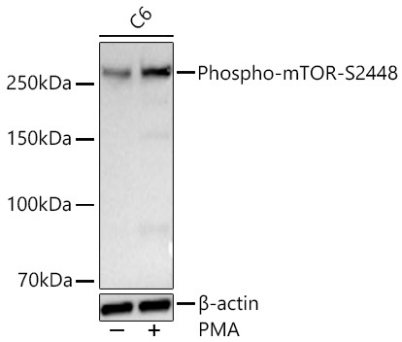
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.

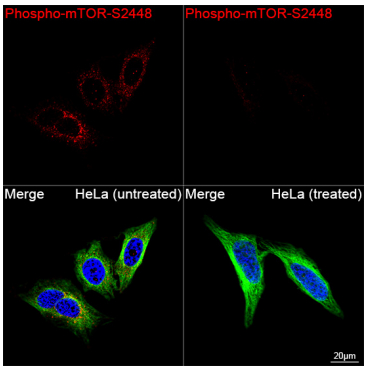
Validation Data



Western blot analysis of lysates from NIH/3T3 cells, using Phospho-mTOR-S2448 Rabbit mAb (AP1413) at 1:1000 dilution. NIH/3T3 cells were treated with EGF (100 ng/ml) at 37℃ for 30 minutes after serum-starvation overnight.
Secondary antibody: HRP-conjugated 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 Enhanced Kit (RM00021).
Exposure time: 120s.



Western blot analysis of lysates from C6 cells using Phospho-mTOR-S2448 Rabbit mAb (AP1413) at 1:1000 dilution incubated overnight at 4℃. C6 cells were treated with PMA (100 nM) at 37℃ for 30 minutes after serum-starvation overnight.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



Confocal imaging of HeLa cells (untreated) and HeLa cells (treated with rapamycin) using Phospho-mTOR-S2448 Rabbit mAb (AP1413, dilution 1:300) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.