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Phospho-mTOR-S2448 Rabbit mAb

Catalog No.: AP1657 Recombinant

Basic Information

Observed MW
289 kDa

Calculated MW
289 kDa

Category
Primary antibody

Applications
WB,IF/ICC,ELISA

Cross-Reactivity
Human, Mouse, Rat

CloneNo number
ARC3845

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	1:2000 - 1:10000
IF/ICC	1:100 - 1:400
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000)，a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
2475

Swiss Prot
P42345

Immunogen
This information is considered to be commercially sensitive.

Synonyms
SKS; FRAP; FRAP1; FRAP2; RAFT1; RAPT1

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.

Contact

400-999-6126

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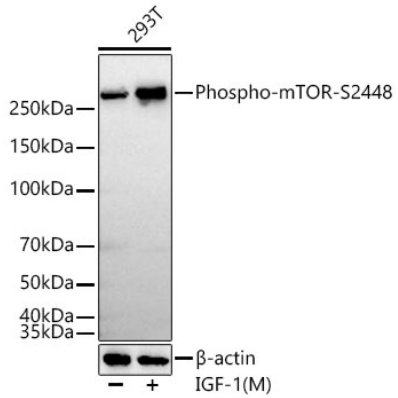
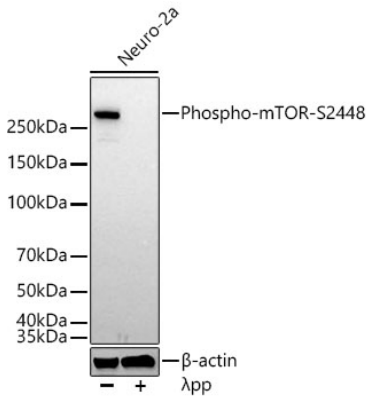
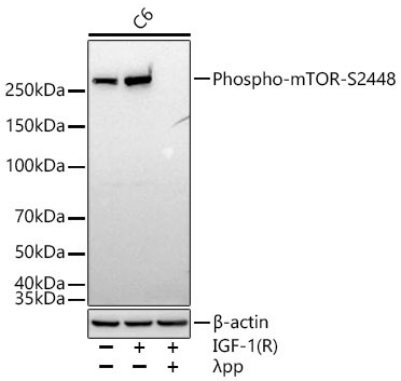
Validation Data



Western blot analysis of lysates from 293T cells using Phospho-mTOR-S2448 Rabbit mAb (AP1657) at 1:10000 dilution incubated overnight at 4℃. 293T cells were treated with IGF-1(M) (200 ng/mL)at 37℃ for 30 minutes after serum-starvation overnight and 1 hour of amino acid deprivation.
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: 90 s.

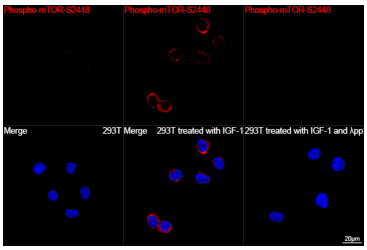


Western blot analysis of lysates from Neuro-2a cells using Phospho-mTOR-S2448 Rabbit mAb (AP1657) at 1:10000 dilution incubated overnight at 4℃. Neuro-2a cells were treated with λpp (2 U/µL) at 30℃ for 1 hour.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90 s.

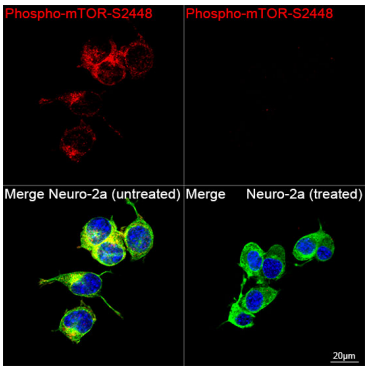


Western blot analysis of lysates from C6 cells using Phospho-mTOR-S2448 Rabbit mAb (AP1657) at 1:10000 dilution incubated overnight at 4℃. C6 cells were treated with IGF-1(R) (200 ng/mL)at 37℃ for 30 minutes and λpp (2 U/µL) at 30℃ for 1 hour after serum-starvation overnight and 1 hour of amino acid deprivation.
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: 90 s.

Validation Data



Confocal imaging of 293T cells (treated with PMA), 293T cells (treated with PMA and λPP), and 293T cells (untreated) using Phospho-mTOR-S2448 Rabbit mAb (AP1657, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of Neuro-2a cells (untreated) and Neuro-2a cells (treated with λPP) using Phospho-mTOR-S2448 Rabbit mAb (AP1657, dilution 1:200) followed by a further incubation with Cy3-conjugated 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 (AS038, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.