Leader in Biomolecular Solutions for Life Science

Phospho-mTOR-S2448 Rabbit mAb

Catalog No.: AP1413 Recombinant



Basic Information

Observed MW

310kDa

Calculated MW

289kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-P,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

IHC-P 1:50 - 1:200

Immunogen Information

Gene ID Swiss Prot2475
P42345

Immunogen

A synthetic phosphorylated peptide around S2448 of human mTOR.

Synonyms

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

Contact

www.abclonal.com

Product Information

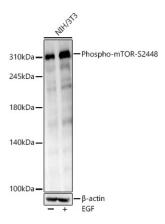
SourceIsotypePurificationRabbitIgGAffinity purification

Storage

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

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

Validation Data



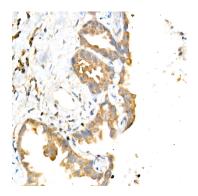
Western blot analysis of NIH/3T3 cells, using Phospho-mTOR-S2448 Rabbit mAb (AP1413) at 1:1000 dilution.NIH/3T3 cells were treated by EGF (100 ng/ml) at 37°C for 30 minutes after serum-starvation

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 Enhanced Kit (RM00021).

Exposure time: 120s.



Immunohistochemistry analysis of paraffinembedded human lung cancer using Phospho-mTOR-S2448 Rabbit mAb (AP1413) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.