

For Research Use Only

Phospho-mTOR (Ser2448) Monoclonal antibody, PBS Only



Catalog Number: 67778-1-PBS

Basic Information

Catalog Number:

67778-1-PBS

Size:

1 mg/ml

Source:

Mouse

Isotype:

IgG2b

GenBank Accession Number:

BC117166

GeneID (NCBI):

2475

Full Name:

FK506 binding protein 12-rapamycin associated protein 1

Calculated MW:

289 kDa

Observed MW:

289 kDa

Purification Method:

Protein A purification

CloneNo.:

2A12G3

Applications

Tested Applications:

WB,IHC,IF,ELISA

Species Specificity:

Human, Mouse, Rat

Background Information

MTOR, also named as FRAP1, FRAP, FRAP2 and RAPT1, belongs to the PI3/PI4-kinase family. MTOR is a Ser/Thr protein kinase that functions as an ATP and amino acid sensor to balance nutrient availability and cell growth. MTOR is kinase subunit of both mTORC1 and mTORC2, which regulate cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. mTORC2 is also activated by growth factors, but seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTOR is phosphorylated at Ser2448 via the PI3 kinase/Akt signaling pathway and autophosphorylated at Ser2481. mTOR plays a key role in cell growth and homeostasis and may be abnormally regulated in tumors.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS only

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

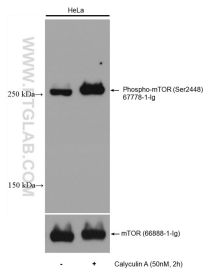
T: 4006900926

E: Proteintech-CN@ptglab.com

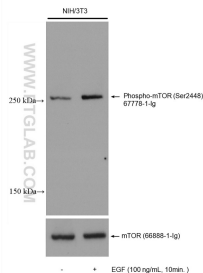
W: ptgcn.com

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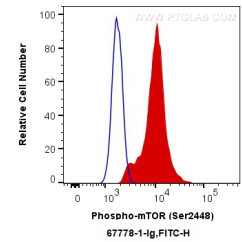
Selected Validation Data



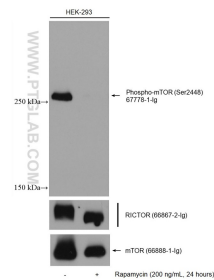
Non-treated and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 67778-1-Ig (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67778-1-PBS in a different storage buffer formulation.



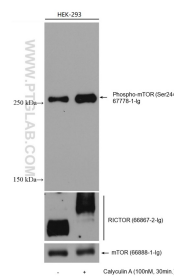
Non-treated and EGF treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 67778-1-Ig (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67778-1-PBS in a different storage buffer formulation.



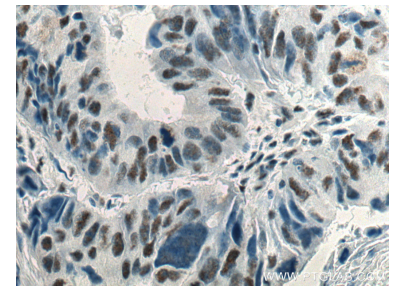
1X10⁶ HEK-293 cells were intracellularly stained with 0.2 ug Anti-Human Phospho-mTOR (Ser2448) (67778-1-Ig, Clone:2A12G3) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 67778-1-PBS in a different storage buffer formulation.



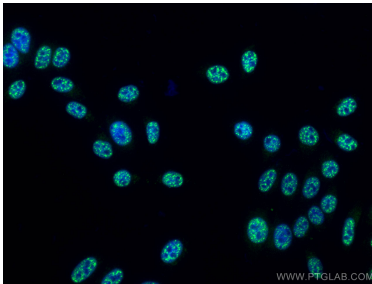
Non-treated and Rapamycin treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 67778-1-Ig (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with RICTOR antibody (66867-2-Ig) and mTOR antibody (66888-1-Ig) subsequently. This data was developed using the same antibody clone with 67778-1-PBS in a different storage buffer formulation.



Non-treated and Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 67778-1-Ig (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with RICTOR antibody (66867-2-Ig) and mTOR antibody (66888-1-Ig) subsequently. This data was developed using the same antibody clone with 67778-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 67778-1-Ig (Phospho-mTOR (Ser2448) antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67778-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Phospho-mTOR (Ser2448) antibody (67778-1-Ig, Clone: 2A12G3) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67778-1-PBS in a different storage buffer formulation.