For Research Use Only

CoraLite® Plus 488-conjugated Phospho-mTOR (Ser2448) Monoclonal antibody

proteintech®
Antibodies | ELISA kits | Proteins
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Catalog Number:CL488-67778

Basic Information

Catalog Number:
CL488-67778

Size:
100ul , Concentration: 1000 μg/ml by Nanodrop;

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

Purification Method:
Protein A purification

CloneNo.:
2A12G3

Recommended Dilutions:
IF 1:50-1:500

Excitation/Emission maxima wavelengths:
488 nm / 515 nm

Applications

Tested Applications:
FC (Intra), IF

Species Specificity:
Human, Mouse

Positive Controls:

IF : HepG2 cells,

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. Avoid exposure to light.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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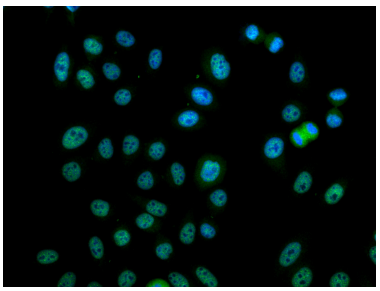
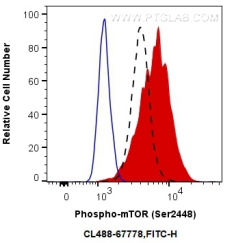
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite® Plus 488 Phospho-mTOR (Ser2448) antibody (CL488-67778, Clone: 2A12G3) at dilution of 1:100. DAPI (blue)



1X10^6 HeLa cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.13 ug CoraLite® Plus 488 Anti-Human Phospho-mTOR (Ser2448) (CL488-67778, Clone:2A12G3), or 0.13 ug Control Antibody (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.