For Research Use Only

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

Catalog Number:CL488-80596

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
CL488-80596

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

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC117166

GeneID (NCBI):
2475

Full Name:
FK506 binding protein 12-rapamycin associated protein 1

Calculated MW:
289 kDa

Observed MW:
250-289 kDa

Purification Method:
Protein A purification

CloneNo.:
3L18

Recommended Dilutions:
IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
IF/ICC, FC (Intra)

Species Specificity:
human, rat

Positive Controls:

IF/ICC : PMA treated HEK-293 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. Stable for one year after shipment.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

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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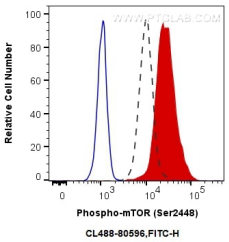
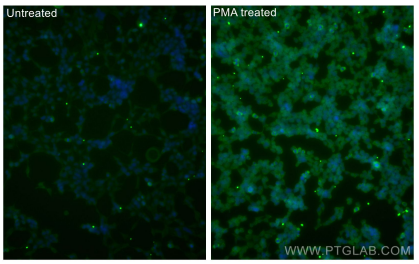
Selected Validation Data



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) (CL488-80596, Clone:3L18) (red), or 0.13 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 80% MeOH.



Immunofluorescent analysis of (-20°C Ethanol) fixed PMA treated HEK-293 cells using CoraLite® Plus 488 Phospho-mTOR (Ser2448) antibody (CL488-80596, Clone: 3L18) at dilution of 1:200.