

For Research Use Only

Phospho-mTOR (Ser2448) Recombinant antibody



Catalog Number: 80596-1-RR **16 Publications**

Basic Information

Catalog Number: 80596-1-RR	GenBank Accession Number: BC117166	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 2475	CloneNo.: 3L18
Source: Rabbit	Full Name: FK506 binding protein 12-rapamycin associated protein 1	Recommended Dilutions: WB 1:5000-1:50000 IF 1:500-1:2000
Isotype: IgG	Calculated MW: 289 kDa	
	Observed MW: 250-289 kDa	

Applications

Tested Applications: IF/ICC, WB, ELISA	Positive Controls:
Cited Applications: WB	WB : HEK-293 cells, Calyculin A treated HSC-T6 cells, HeLa cells, Calyculin A treated HEK-293 cells, Calyculin A treated HeLa cells
Species Specificity: Human, Rat	IF : PMA treated HEK-293 cells,
Cited Species: human, rat, mouse, bovine	

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.

Notable Publications

Author	Pubmed ID	Journal	Application
Ying-Ying Li	36160409	Front Pharmacol	WB
Guopeng Chen	36056952	J Cancer Res Clin Oncol	WB
Ying-Ying Li	36341817	J Ethnopharmacol	WB

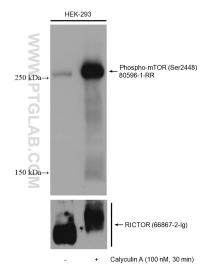
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

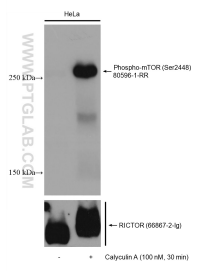
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



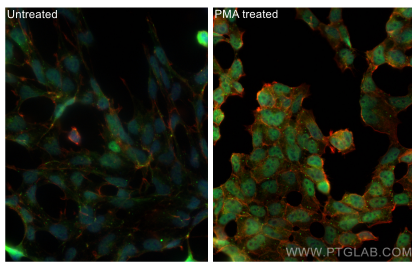
Non-treated and Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 80596-1-RR (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with RICTOR antibody (66867-2-ig) subsequently.



Non-treated and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 80596-1-RR (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) subsequently.



Calyculin A treated HSC-T6 cells were subjected to SDS PAGE followed by western blot with 80596-1-RR (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed PMA treated HEK-293 cells using Phospho-mTOR (Ser2448) antibody (80596-1-RR, Clone: 3L18) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).