

For Research Use Only

Phospho-mTOR (Ser2481) Polyclonal antibody



Catalog Number: 28879-1-AP

2 Publications

Basic Information

Catalog Number:

28879-1-AP

Size:

350 µg/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC117166

GeneID (NCBI):

2475

UNIPROT ID:

P42345

Full Name:

FK506 binding protein 12-rapamycin associated protein 1

Calculated MW:

289 kDa

Observed MW:

250-289 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB

Species Specificity:

Mouse

Cited Species:

mouse

Positive Controls:

WB: Insulin treated NIH/3T3 cells,

Background Information

MTOR, also named 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 the 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
Hefei Wang	37741537	Chem Biol Interact	WB
Baomei Xia	33307051	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:

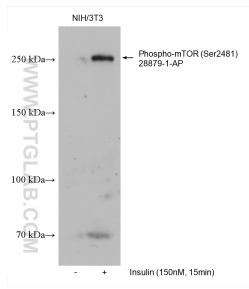
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Selected Validation Data



Nontreated and insulin-treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 28879-1-AP (Phospho-mTOR (Ser2481) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.