



mTOR (phospho Ser2481) Polyclonal Antibody

Catalog No	YP-Ab-14569
Isotype	IgG
Reactivity	Human;Mouse;Rat;Bovine
Applications	WB;IHC;IF;ELISA
Gene Name	MTOR
Protein Name	Serine/threonine-protein kinase mTOR
Immunogen	The antiserum was produced against synthesized peptide derived from human mTOR around the phosphorylation site of Ser2481. AA range:2447-2496
Specificity	Phospho-mTOR (S2481) Polyclonal Antibody detects endogenous levels of mTOR protein only when phosphorylated at S2481.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. ,WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MTOR; FRAP; FRAP1; FRAP2; RAFT1; RAPT1; Serine/threonine-protein kinase mTOR; FK506-binding protein 12-rapamycin complex-associated protein 1; FKBP12-rapamycin complex-associated protein; Mammalian target of rapamycin; mTOR; Mechanistic tar
Observed Band	
Cell Pathway	Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Golgi apparatus membrane ; Peripheral membrane protein ; Cytoplasmic side . Mitochondrion outer membrane ; Peripheral membrane protein ; Cytoplasmic side . Lysosome . Cytoplasm . Nucleus, PML body . Microsome membrane . Lysosome membrane . Cytoplasmic vesicle, phagosome . Shuttles between cytoplasm and nucleus. Accumulates in the nucleus in response to hypoxia (By similarity). Targeting to lysosomes depends on amino acid availability and RRAGA and RRAGB (PubMed:18497260, PubMed:20381137). Lysosome targeting also depends on interaction with MEAK7. Translocates to the lysosome membrane in the presence of TM4SF5 (PubMed:30956113). .
Tissue Specificity	Expressed in numerous tissues, with highest levels in testis.
Function	function:Acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. Part of the TORC2 complex which plays a critical role in AKT1 Ser-473 phosphorylation, and may modulate the



phosphorylation of PKCA and regulate actin cytoskeleton organization.,similarity:Belongs to the PI3/PI4-kinase family.,similarity:Contains 1 FAT domain.,similarity:Contains 1 FATC domain.,similarity:Contains 1 PI3K/PI4K domain.,similarity:Contains 7 HEAT repeats.,subunit:Interacts with the FKBP12-rapamycin complex. Binds UBQLN1. Forms part of the mammalian target of rapamycin 2 complex (TORC2) comprised of FRAP1, GBL, PRR5, RICTOR and SIN. TORC2 does not bind to and is not sensitive to FKBP12-rapamycin. Binds directly to PRR5 and RICTOR within the TORC2 complex.,tissue specificity:Expressed in numerous tissues, with highest levels in testis.,

Background

The protein encoded by this gene belongs to a family of phosphatidylinositol kinase-related kinases. These kinases mediate cellular responses to stresses such as DNA damage and nutrient deprivation. This protein acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. The ANGPTL7 gene is located in an intron of this gene. [provided by RefSeq, Sep 2008],

matters needing attention

Avoid repeated freezing and thawing!

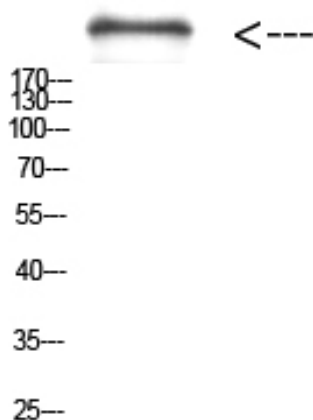
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

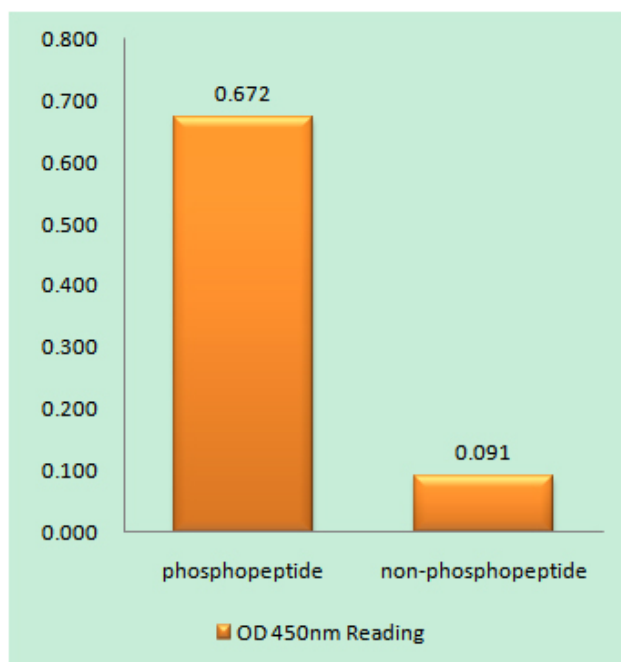


Products Images

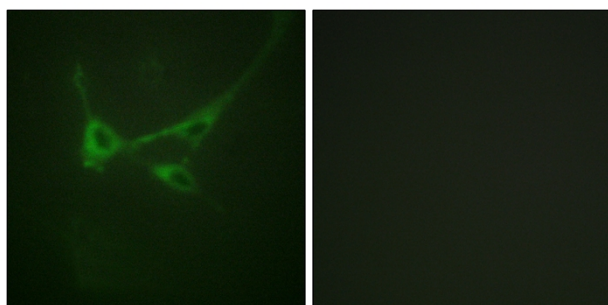
Hela-UV



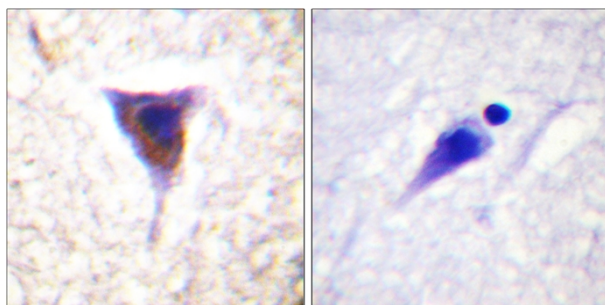
Western Blot analysis of hela-UV using Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using mTOR (Phospho-Ser2481) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using mTOR (Phospho-Ser2481) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using mTOR (Phospho-Ser2481) Antibody. The picture on the right is blocked with the phospho peptide.