Anti-Phospho-mTOR (Ser2481) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R013931

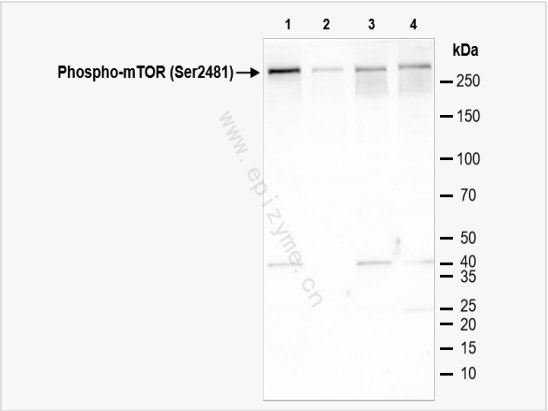
Product Information

Application	ELISA, WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	89P95T30
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding Ser2481 of human mTOR
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-mTOR (Ser2481) Rabbit mAb [89P95T30] is for research use only and not for use in diagnostic or therapeutic procedures.

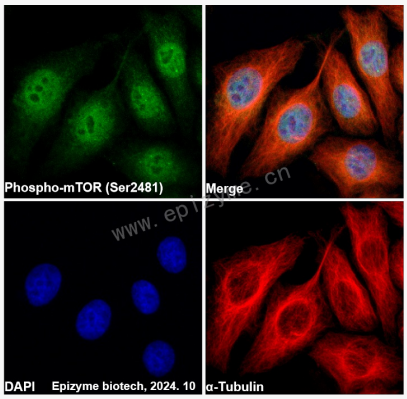
Protein Information

Synonyms	dJ576K7.1 (FK506 binding protein 12 rapamycin associated protein 1), FK506 binding protein 12 rapamycin associated protein 1, FK506 binding protein 12 rapamycin associated protein 2, FK506 binding protein 12 rapamycin complex associated protein 1, FK506-binding protein 12-rapamycin complex-associated protein 1, FKBP rapamycin associated protein, FKBP12 rapamycin complex associated protein, FKBP12-rapamycin complex-associated protein 1, FKBP12-rapamycin complex-associated protein, FLJ44809, FRAP, FRAP1, FRAP2, Mammalian target of rapamycin, Mechanistic target of rapamycin, mTOR, MTOR_HUMAN, OTTHUMP00000001983, RAFT1, Rapamycin and FKBP12 target 1, Rapamycin associated protein FRAP2, Rapamycin target protein 1, Rapamycin target protein, RAPT1, Serine/threonine-protein kinase mTOR.
Calculated MW	Calculated MW: 289 kDa; Observed MW: 289 kDa
Uniprot ID	P42345
Gene ID	2475
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]
Cellular Location	Endoplasmic reticulum membrane. Golgi apparatus membrane. Mitochondrion outer membrane. Lysosome. Cytoplasm. Nucleus > PML body. 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

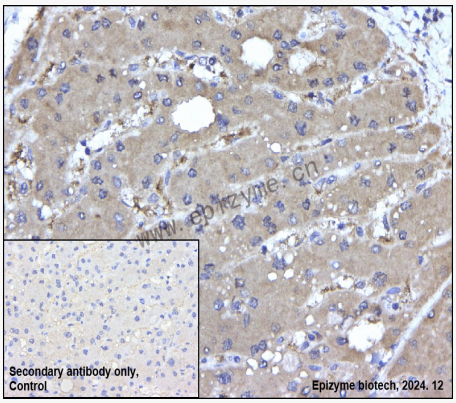
Validation Images



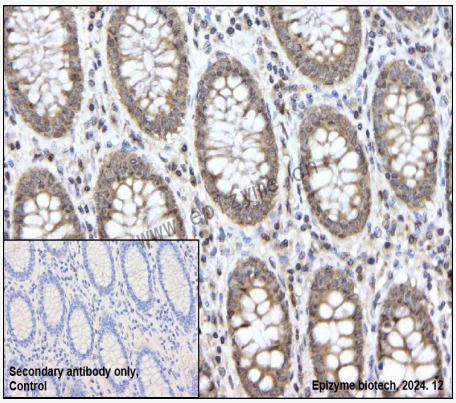
Western Blot - Anti-Phospho-mTOR (Ser2481) mAb [89P95T30]
All lanes: R013931 at 1:1,000 dilution
Lane 1: MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 3: HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates
Lane 4: SW620 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 289 kDa
Observed band size: 289 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Phospho-mTOR (Ser2481) Rabbit mAb [89P95T30]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R013931 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Phospho-mTOR (Ser2481) Rabbit mAb [89P95T30]
Sample: Paraformaldehyde-fixed, paraffin embedded human hepatoma cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R013931 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Phospho-mTOR (Ser2481) Rabbit mAb [89P95T30]
Sample: Paraformaldehyde-fixed, paraffin embedded human colonic cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R013931 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
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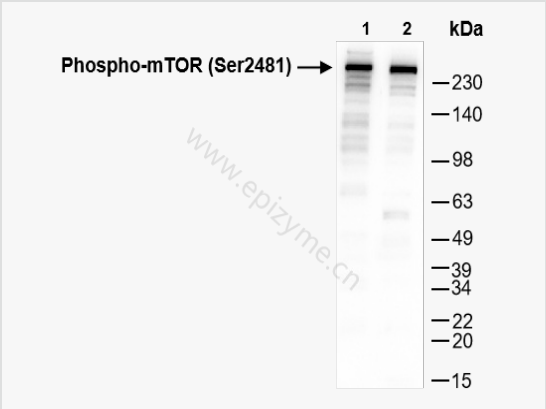

Western Blot -Anti-Phospho-mTOR (Ser2481) Rabbit mAb [89P95T30]
All lanes: R013931 at 1:1,000 dilution
Lane 1: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 2: PC-12(Rat adrenal pheochromocytoma epithelial cell)whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 289 kDa
Observed band size: 289 kDa
Developed using the ECL technique (Cat. No. SQ201).