Anti-mTOR Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P100846

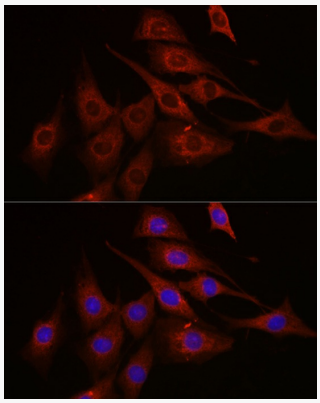
Product Information

Application	WB, IF (Cell)/ICC, IP, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:100~1:500; IF 1:50~1:200; IP 0.5μg-4μg antibody for 200μg-400μg extracts of whole cells
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 2400-2500 of human mTOR (NP_004949.1).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% 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-mTOR Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

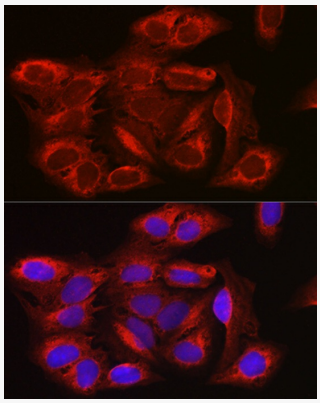
Protein Information

Synonyms	SKS; FRAP; FRAP1; FRAP2; RAFT1; RAPT1; 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 kinase is a component of two distinct complexes, mTORC1, which controls protein synthesis, cell growth and proliferation, and mTORC2, which is a regulator of the actin cytoskeleton, and promotes cell survival and cell cycle progression. This protein acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. Inhibitors of mTOR are used in organ transplants as immunosuppressants, and are being evaluated for their therapeutic potential in SARS-CoV-2 infections. Mutations in this gene are associated with Smith-Kingsmore syndrome and somatic focal cortical dysplasia type II. The ANGPTL7 gene is located in an intron of this gene.

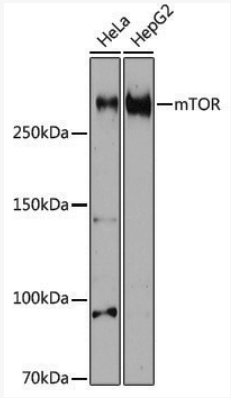
Validation Images



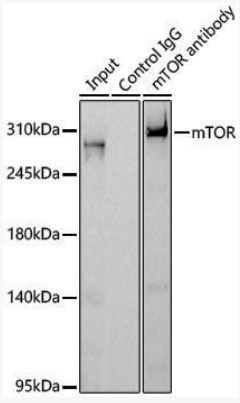
Immunofluorescence analysis of NIH-3T3 cells using mTOR Rabbit pAb (P100846) at dilution of 1:100 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using mTOR Rabbit pAb (P100846) at dilution of 1:100 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of various lysates using mTOR Rabbit pAb (P100846) at 1:500 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 60s.



Immunoprecipitation analysis of 300ug extracts of K-562 cells using 3ug mTOR Rabbit pAb (P100846 1:50). Western blot was performed from the immunoprecipitate using mTOR Rabbit pAb (P105144) at a dilition of 1:500.