Anti-mTOR Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P105144

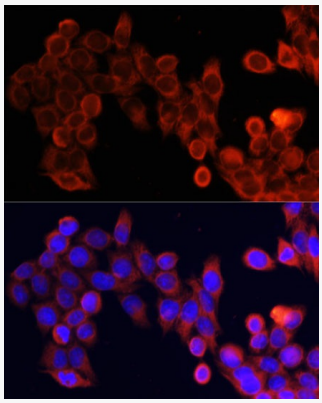
Product Information

Application	WB, IF (Cell)/ICC, IP, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; 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	Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 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.

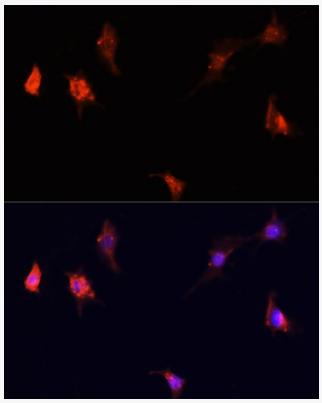
Protein Information

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.

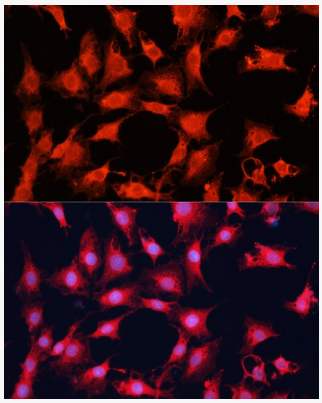
Validation Images



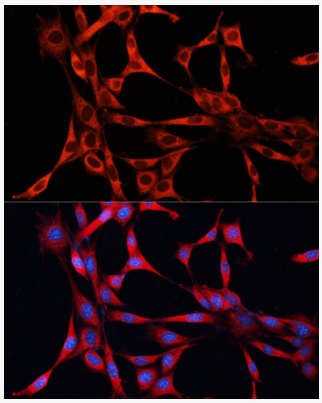
Immunofluorescence analysis of HeLa cells using mTOR Rabbit pAb (P105144) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



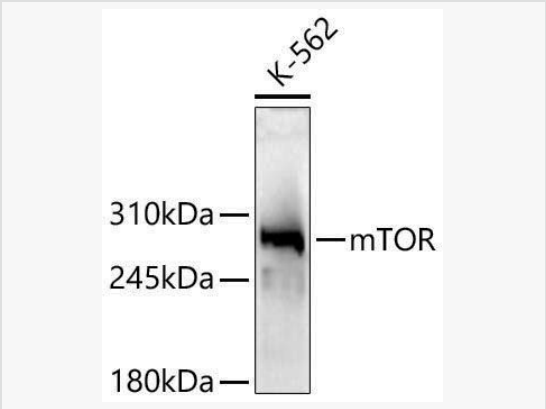
Immunofluorescence analysis of PC12 cells using mTOR Rabbit pAb (P105144) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



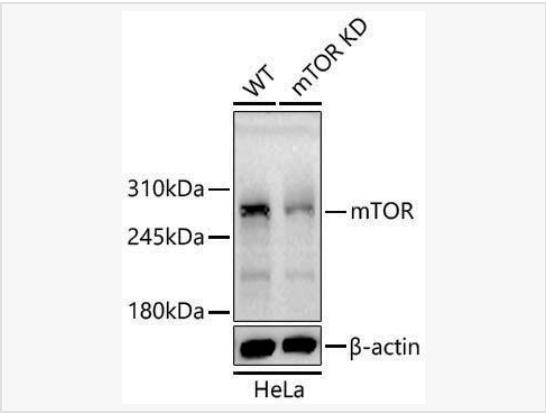
Immunofluorescence analysis of C6 cells using mTOR Rabbit pAb (P105144) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



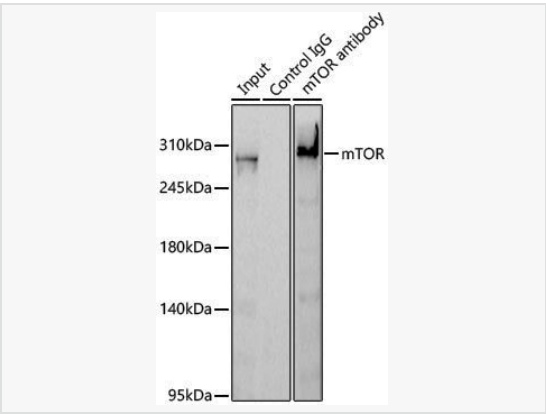
Immunofluorescence analysis of NIH/3T3 cells using mTOR Rabbit pAb (P105144) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of lysates from K-562 cells using mTOR Rabbit pAb (P105144) at 1:2,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 60s.



Western blot analysis of lysates from wild type (WT) and mTOR knockdown (KD) HeLa cells using mTOR Rabbit pAb (P105144) at 1:2,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.Lysates/proteins: 14 µg 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 (P105144 1:70). Western blot was performed from the immunoprecipitate using mTOR Rabbit pAb (P105144) at a dilition of 1:500.