

Product datasheet for **TA378783S**

MTOR Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, ICC/IF, IP, WB
Recommended Dilution:	WB, 1:100 - 1:500 IF/ICC, 1:50 - 1:200 IP, 0.5µg-4µg antibody for 200µg-400µg extracts of whole cells ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
Reactivity:	Human, Mouse
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Formulation:	Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	289kDa
Gene Name:	mechanistic target of rapamycin
Database Link:	Entrez Gene 2475 Human P42345



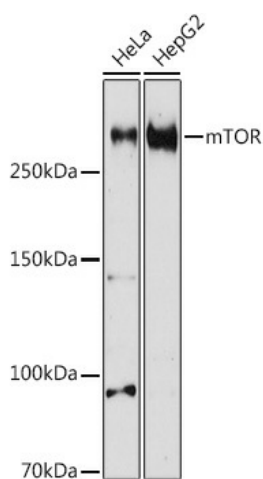
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Background:

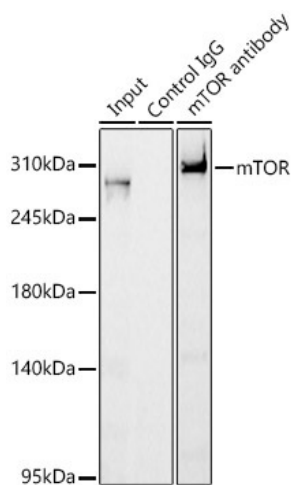
The protein encoded by this gene belongs to a family of phosphatidylinositol kinase-related kinases. These kinases mediate cellular responses to stresses such as DNA damage and nutrient deprivation. This kinase is a component of two distinct complexes, mTORC1, which controls protein synthesis, cell growth 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.

Synonyms:

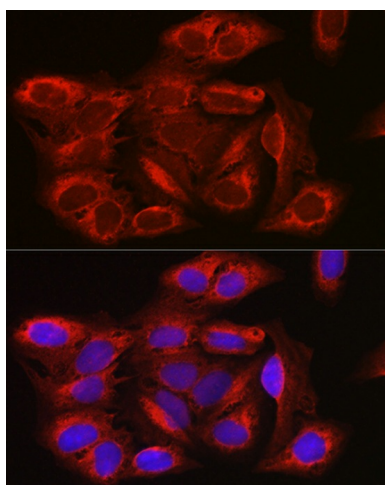
FLJ44809; FRAP; FRAP1; FRAP2; KIAA1303; RAFT1; RAPT1; RAPTOR; RPTOR

Product images:


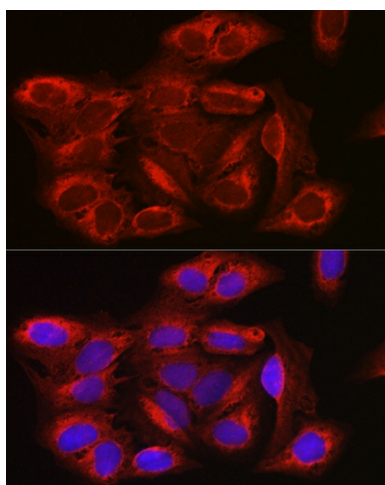
Western blot analysis of various lysates using mTOR Rabbit pAb ([TA378783]) at 1:500 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 60s.



Immunoprecipitation analysis of 300ug extracts of K-562 cells using 3ug mTOR Rabbit pAb ([TA378783] 1:50). Western blot was performed from the immunoprecipitate using mTOR Rabbit pAb (A2445) at a dilution of 1:500.



Immunofluorescence analysis of NIH-3T3 cells using mTOR Rabbit pAb ([TA378783]) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using mTOR Rabbit pAb ([TA378783]) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.