

Product datasheet for **TP320457M**

MTOR (NM_004958) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human FK506 binding protein 12-rapamycin associated protein 1 (FRAP1/MTOR), 100 µg

Species: Human

Expression Host: HEK293T



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Expression cDNA >RC220457 representing NM_004958
Clone or AA **Red**=Cloning site **Green**=Tags(s)
Sequence:

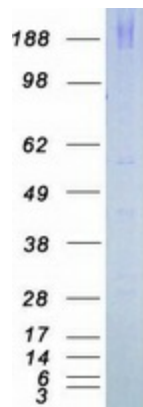
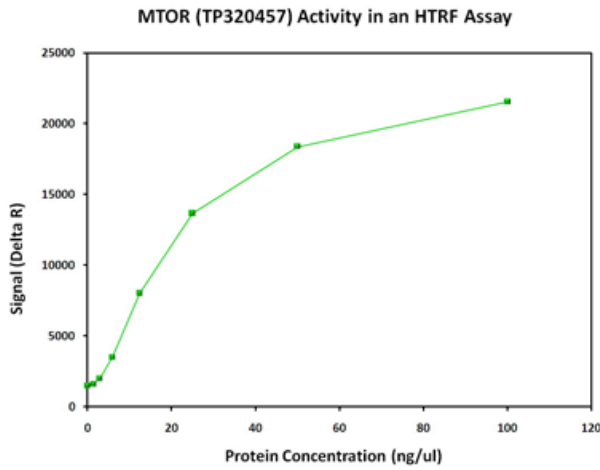
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW:	288.7 kDa
Concentration:	>0.1 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_004949
Locus ID:	2475
UniProt ID:	P42345
RefSeq Size:	8680
Cytogenetics:	1p36.22
RefSeq ORF:	7647
Synonyms:	FRAP; FRAP1; FRAP2; RAFT1; RAPT1; SKS
Summary:	<p>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. [provided by RefSeq, Aug 2020]</p>
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Acute myeloid leukemia, Adipocytokine signaling pathway, ErbB signaling pathway, Glioma, Insulin signaling pathway, mTOR signaling pathway, Pathways in cancer, Prostate cancer, Type II diabetes mellitus

Product images:



Coomassie blue staining of purified MTOR protein (Cat# [TP320457]). The protein was produced from HEK293T cells transfected with MTOR cDNA clone (Cat# [RC220457]) using MegaTran 2.0 (Cat# [TT210002]).