

## Product datasheet for **PH320457**

### MTOR (NM\_004958) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	MTOR MS Standard C13 and N15-labeled recombinant protein (NP_004949)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC220457
Predicted MW:	288.7 kDa



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**Protein Sequence:** >RC220457 representing NM\_004958  
 Red=Cloning site Green=Tags(s)

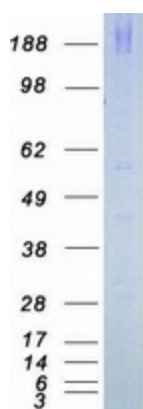
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 RLREEMEEITQQQLVHDKYCKDLMGFGTKPRHITPFTSFQAVQPQQSNALVGLLGYSSHQGLMGFTSPS  
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 FLKLGWQLNLQGINESTIPKVLQYSAATEHDRSWYKAWHAWVMNFEAVLHYKHQNARDEK KKL RHA  
 SGANITNATTAATTAATATTTASTEGSNSESEAE STENSPTSP LQKKVTE DLSKTL LMYTPAVQGF FR  
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 LEEASRLYFGERNVKG MFEVLEPLHAMMERGPQTLKETSFNQAYGRDLMEAEQEWCRKYMKSGNVKDLTQA  
 WDLYYHVFRRI SKQLPQLTSLELQYVSPKLLMCRDLELAVPGTYDPNQPIIRIQSIAPSLQVITSKQRP  
 KLTLMGNSNGHEFVFLKKGHEDLRQDERVMQLFGLVNTLLANDPTSLRKNLSIQRYAVIPLSTNSGLIGW  
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 RMLTNAMEVTGLDGNRYITCHTVMEVLRHKDSVMAVLEAFVYDPLLNRWLMNTNKGKRSRTRTDSYS  
 AGQSVEILDGVELGEP AHKKTGTTVPESHSF IGDLVKPEALNKKAIQI INRVDRKLTGRDFSHDDTL D  
 VPTQVELLIKQATSHENLCQCYIGWCPFW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

- Tag:** C-Myc/DDK
- Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining
- Concentration:** >0.05 µg/µL as determined by microplate BCA method
- Labeling Method:** Labeled with [U- <sup>13</sup>C<sub>6</sub>, <sup>15</sup>N<sub>4</sub>]-L-Arginine and [U- <sup>13</sup>C<sub>6</sub>, <sup>15</sup>N<sub>2</sub>]-L-Lysine
- Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3
- Storage:** Store at -80°C. Avoid repeated freeze-thaw cycles.

<b>Stability:</b>	Stable for 3 months from receipt of products under proper storage and handling conditions.
<b>RefSeq:</b>	<a href="#">NP_004949</a>
<b>RefSeq Size:</b>	8680
<b>RefSeq ORF:</b>	7647
<b>Synonyms:</b>	FRAP; FRAP1; FRAP2; RAFT1; RAPT1; SKS
<b>Locus ID:</b>	2475
<b>UniProt ID:</b>	<a href="#">P42345</a>
<b>Cytogenetics:</b>	1p36.22
<b>Summary:</b>	<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>
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	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]).