

## Product datasheet for **TA354493**

### Mtor Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB 0.1-1 µg/ml ELISA 0.01-0.1 µg/ml IP 2-5 µg/ml IHC 2-10 µg/ml FC 5-10 µg/ml
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic peptide corresponding to the C-terminus of human mTOR protein. This sequence is identical among human, rat, mouse, chicken, dog and bovine species.
Formulation:	This affinity purified antibody is supplied in sterile Phosphate buffered saline (pH7.2) containing antibody stabilizer.
Purification:	The Rabbit IgG is purified by Epitope Affinity Purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	290 kDa
Gene Name:	mechanistic target of rapamycin
Database Link:	<a href="#">NP_063971</a> <a href="#">Entrez Gene 2475 Human</a> <a href="#">Entrez Gene 56717 Mouse</a> <a href="#">Entrez Gene 56718 Rat</a> <a href="#">P42346</a>



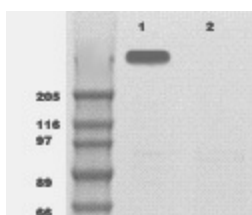
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**Background:**

The mammalian target of rapamycin (mTOR), also named FKBP12 rapamycin-associated protein (FRAP/RAFT/RAPT/SEP), is a Ser/Thr protein kinase that plays a crucial role in a nutrient-sensitive signalling pathway that regulates cell growth. TOR signalling is potently inhibited by rapamycin, through the direct binding of a FK506-binding protein 12 (FKBP12)/rapamycin complex to the TOR FRB domain, a segment amino terminal to the kinase catalytic domain. mTOR is involved in the regulation of cell growth through initiation of gene translation in response to nutrients such as amino acids (mainly leucine), growth factors, insulin and mitogens. mTOR initiates translation by activating the ribosomal p70S6k protein kinase (S6K1) and by inhibiting the eIF4E inhibitor 4E-BP1. mTOR is phosphorylated at serine 2448 via the phosphatidylinositol 3-kinase (PI3K)/Akt pathway and is autophosphorylated at serine 2481.

**Synonyms:**

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

**Product images:**

WB: The Cell lysate derived from MCF-7 was immuno-precipitated by Rb anti-mTOR, resolved onto 7.5% SDS-PAGE, transferred onto NC membrane, then immune-blotted by the same antibody (Rb anti-mTOR, at 1:500). An immunoreactive band around ~205 kDa was observed (lane 1). Lane 2 is a negative control.