

## Product datasheet for **AP06541PU-N**

### MTOR Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 2450-2500 of Human mTOR.
Specificity:	This antibody detects endogenous levels of mTOR protein. (region surrounding Pro2476)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 289 kDa
Gene Name:	mechanistic target of rapamycin
Database Link:	<a href="#">Entrez Gene 2475 Human P42345</a>



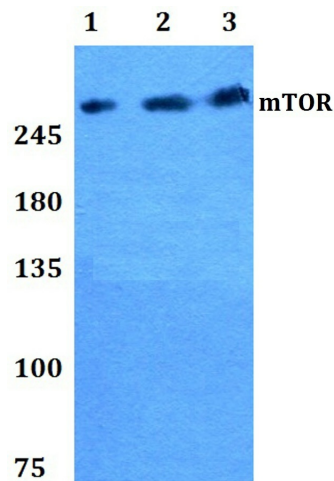
[View online »](#)

**Background:**

mTOR, or FKBP12-rapamycin associated protein (FRAP), is one of a family of proteins involved in cell cycle progression, DNA recombination, and DNA damage detection. In rat, it is a 245-kDa protein (symbolized RAFT1) with significant homology to the *Saccharomyces cerevisiae* protein TOR1 and has been shown to associate with the immunophilin FKBP12 in a rapamycin-dependent fashion. The FKBP12-rapamycin complex is known to inhibit progression through the G1 cell cycle stage by interfering with mitogenic signaling pathways involved in G1 progression in several cell types, as well as in yeast. The binding of FRAP to FKBP12-rapamycin correlated with the ability of these ligands to inhibit cell cycle progression.

**Synonyms:**

Mammalian target of rapamycin, TOR, FRAP, FRAP2, RAPT1

**Product images:**


Western blot (WB) analysis of mTOR antibody at 1/500 dilution Lane 1:HEK293T whole cell lysate Lane 2:sp2/0 whole cell lysate Lane 3:H9C2 whole cell lysate



Immunohistochemistry (IHC) analysis of mTOR antibody in paraffin-embedded human brain tissue.