

Product datasheet for **AP09511PU-N**

MTOR Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	Immunohistochemistry: 1/50 - 1/100.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthesized non-phosphopeptide derived from human mTOR around the phosphorylation site of serine 2481 (I-H-SP-F-I).
Specificity:	mTOR Antibody detects endogenous levels of total mTOR protein.
Formulation:	Phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid purified Ig
Concentration:	lot specific
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	mechanistic target of rapamycin
Database Link:	Entrez Gene 56717 Mouse Entrez Gene 56718 Rat Entrez Gene 2475 Human P42345



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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 289-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:

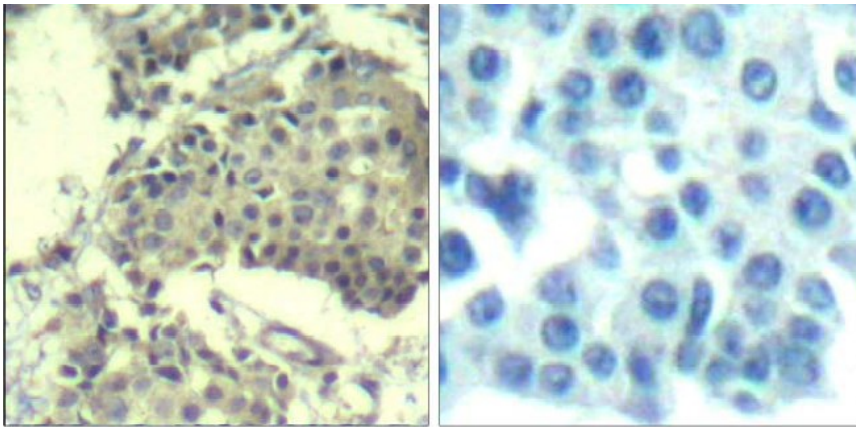
Mammalian target of rapamycin, TOR, FRAP, FRAP2, RAPT1

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:

Peptide

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Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using mTOR Antibody