

Product datasheet for **AP20800PU-M**

MTOR pSer2448 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000. Immunohistochemistry on paraffin sections 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of mTOR protein when phosphorylated at Ser2448.
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 15 mM sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 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:	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 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:

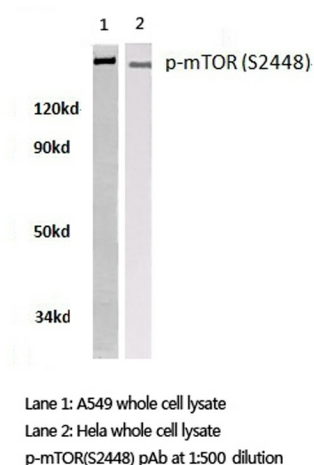
Mammalian target of rapamycin, TOR, FRAP, FRAP2, RAPT1

Protein Families:

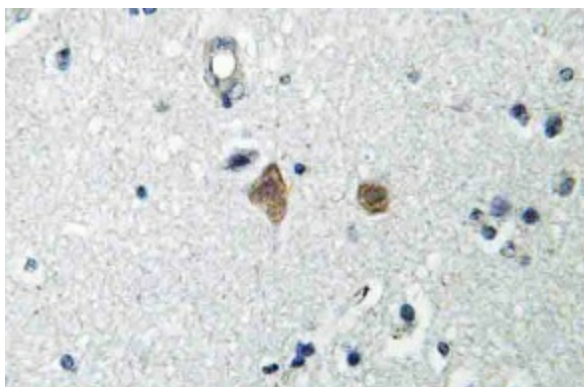
Druggable Genome, Protein Kinase

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:


Western blot (WB) analysis of p-mTOR antibody (Cat.-No.: [AP20800PU-N]) in extracts from A549 and HeLa cells.



Immunohistochemistry (IHC) analyzes of mTOR antibody (Cat.-No.: [AP20800PU-N]) in paraffin-embedded human brain tissue.