

# Product datasheet for AP20712PU-M

# **MTOR Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type: Primary Antibodies** 

**Applications:** IF, IHC, WB

Recommended Dilution: Western blot: 1/500 - 1/1000.

Immunohistochemistry on paraffin sections: 1/50 - 1/200.

Immunofluorescence: 1/50 - 1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Specificity: This antibody detects endogenous levels of mTOR protein.

(region surrounding Ser2442)

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; 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: Entrez Gene 56717 MouseEntrez Gene 56718 RatEntrez Gene 2475 Human

P42345



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### MTOR Rabbit Polyclonal Antibody - AP20712PU-M

**Background:** Regulatory associated protein of mTOR, also designated Raptor, is a binding partner for

mammalian target of rapamycin kinase (mTOR), and is essential for mTOR signalling in vivo. Raptor binding to mTOR is critical for mTORcatalysed substrate phosphorylation of 4EBP1. The Raptor-mTOR complex is nutrient-sensitive and is important for a mechanism by which cells coordinate cell growth and size with changing environmental conditions. Raptor serves as a negative regulator of mTOR kinase activity under nutrient-deprived conditions and is an important component in the mTOR pathway. Raptor is highly expressed in skeletal muscle

and to a lesser extent in brain, kidney, lung and placenta.

**Synonyms:** Mammalian target of rapamycin, TOR, FRAP, FRAP2, RAPT1

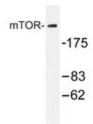
**Protein Families:** Druggable Genome, Protein Kinase

**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 analysis of FoxO4 antibody (Cat.-No.: [AP20712PU-N]) in extracts from NIH/3T3 cells treated with Wortmannin 40mM 24hours.



Immunohistochemistry analyzes of mTOR antibody (Cat.-No.: [AP20712PU-N]) in paraffinembedded human brain tissue.