

Product datasheet for **AP20712PU-N**

MTOR Rabbit Polyclonal Antibody

Product data:

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|-------------------------|--|
| 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 Mouse Entrez Gene 56718 Rat Entrez Gene 2475 Human P42345 |



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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:

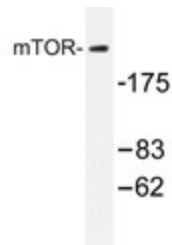
Mammalian target of rapamycin, TOR, FRAP, FRAP2, RAPT1

Protein Families:

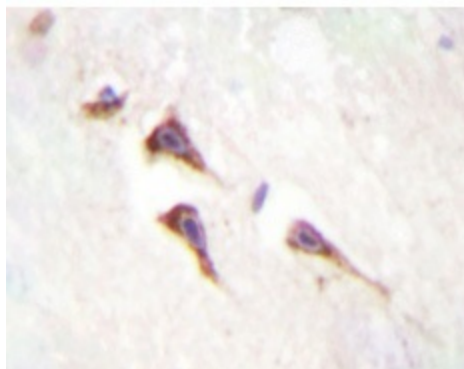
Druggable Genome, Protein Kinase

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 paraffin-embedded human brain tissue.