

AP07823PU-N

Polyclonal Antibody to mTOR / FRAP1 - Aff - Purified

Alternate names:

FK506-binding protein 12-rapamycin complex-associated protein 1, FKBP12-rapamycin complex-associated protein, FRAP, FRAP2, Mammalian target of rapamycin, RAPT1, Rapamycin target protein, Serine/threonine-protein kinase mTOR, TOR

Quantity:

50 µg

Concentration:

0.9 mg/ml

Background:

The mammalian Target of Rapamycin (TOR, also known as mTOR) is an evolutionarily conserved serine/threonine kinase that regulates cell growth and cell cycle through its ability to integrate signals from nutrient levels and growth factors. It was initially discovered as a kinase whose ability to stimulate T cell proliferation in response to IL-2 could be inhibited by the immunosuppressive drug rapamycin. Rapamycin inhibits TOR in other cell types resulting in reduced cell growth and reduced rates of cell cycle and cell proliferation. TOR is normally associated with the regulatory proteins RAPTOR and GbL. Its downstream targets are thought to be the ribosomal protein S6 kinases and the eukaryotic initiation factor 4E binding proteins (4EBPs). Regulation of these protein families allows TOR to control protein biosynthesis.

Uniprot ID:

[P42345](#)

NCBI:

[NP_004949.1](#)

GeneID:

[2475](#)

Host:

Rabbit

Immunogen:

Synthetic Peptide corresponding to Amino acids 2440-2457 of human mTOR.

Format:

State: Liquid purified IgG fraction

Purification: Immunoaffinity Chromatography

Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 with 0.01% (w/v) Sodium Azide as preservative.

Applications:

ELISA: 1/4000 - 1/20000.

Immunofluorescence.

Immunohistochemistry on Paraffin Sections: 2.5 µg/ml.

Western Blot: 1/250 - 1/2000.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody recognises MTOR.

Species Reactivity:

Tested: Human.

Expected from sequence similarity: Mouse, Rat, Canine (Dog) and Zebrafish.

Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

Pictures:

Figure 2. Staining mTOR in Testis by Immunohistochemistry using Formalin-Fixed Paraffin-Embedded (FFPE) tissue.

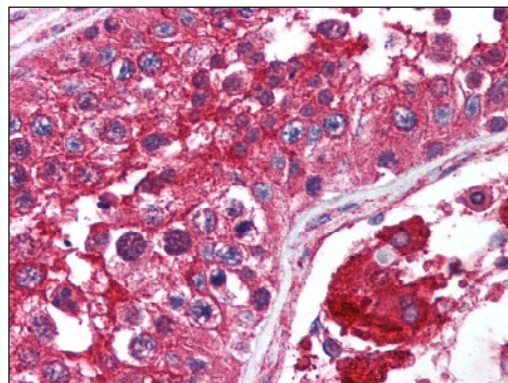


Figure 1. Staining mTOR in Prostate by Immunohistochemistry using Formalin-Fixed Paraffin-Embedded (FFPE) tissue.

