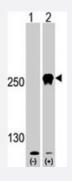


## MTOR polyclonal antibody

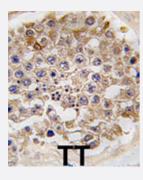
Catalog # PAB1988 Size 400 uL

### **Applications**



### Western Blot (Transfected lysate)

Western blot analysis of MTOR (arrow) using rabbit polyclonal MTOR polyclonal antibody (Cat # PAB1988). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MTOR gene (Lane 2) (Origene Technologies).



# Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human testis tissue reacted with MTOR polyclonal antibody (Cat # PAB1988), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of FRAP1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to residues surrounding S2481 of human F RAP1.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein A purification



### **Product Information**

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:10-50) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

# Applications

Western Blot (Transfected lysate)

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Gene Info — MTOR	
Entrez GenelD	<u>2475</u>
Protein Accession#	NP_004949;P42345
Gene Name	MTOR
Gene Alias	FRAP, FRAP1, FRAP2, RAFT1, RAPT1
Gene Description	mechanistic target of rapamycin
Omim ID	<u>601231</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The protein encoded by this gene belongs to a family of phosphatidylinositol kinase-related kinas es. These kinases mediate cellular responses to stresses such as DNA damage and nutrient dep rivation. This protein acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. The ANGPTL7 gene is located in an intron of this gene. [provided by RefSeq]



#### **Product Information**

**Other Designations** 

FK506 binding protein 12-rapamycin associated protein 1|FK506 binding protein 12-rapamycin a ssociated protein 2|FK506-binding protein 12-rapamycin complex-associated protein 1|FKBP-rapamycin associated protein|FKBP12-rapamycin complex-associated protein 1

### **Publication Reference**

Metformin inhibits mammalian target of rapamycin-dependent translation initiation in breast cancer cells.

Dowling RJ, Zakikhani M, Fantus IG, Pollak M, Sonenberg N.

Cancer Research 2007 Nov; 67(22):10804.

 Activation of the PTEN/mTOR/STAT3 pathway in breast cancer stem-like cells is required for viability and maintenance.

Zhou J, Wulfkuhle J, Zhang H, Gu P, Yang Y, Deng J, Margolick JB, Liotta LA, Petricoin E 3rd, Zhang Y. PNAS 2007 Oct; 104(41):16158.

### **Pathway**

- 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

#### Disease

- Adenocarcinoma
- Alzheimer disease



- Cardiovascular Diseases
- Colonic Neoplasms
- Diabetes Complications
- Esophageal Neoplasms
- Kidney Failure
- Metabolic Syndrome X
- Neoplasms
- Osteoporosis
- Rectal Neoplasms
- Tobacco Use Disorder