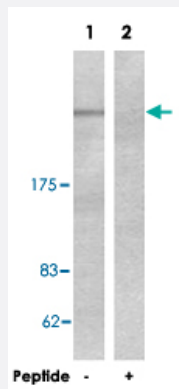


MTOR polyclonal antibody

Catalog # PAB17319 Size 100 ug

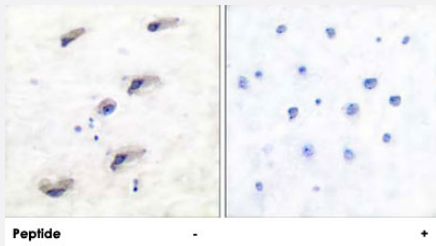
Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from K-562 cells, using MTOR polyclonal antibody (Cat # PAB17319).

Peptide "+" means "with peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using MTOR polyclonal antibody (Cat # PAB17319).

Peptide "+" means "with peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of MTOR.
Immunogen	A synthetic peptide corresponding to residues surrounding serine 2448 of human MTOR.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody detects endogenous levels of total MTOR protein.
Form	Liquid

Recommend Usage	Western Blot (1:500-1:1000) ELISA (1:40000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (150mM NaCl, 0.02% sodium azide, 50% glycerol)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from K-562 cells, using MTOR polyclonal antibody (Cat # PAB17319).

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Gene Info — MTOR

Entrez GeneID	2475
Protein Accession#	P42345
Gene Name	MTOR
Gene Alias	FRAP, FRAP1, FRAP2, RAFT1, RAPT1
Gene Description	mechanistic target of rapamycin
Omim ID	601231
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene belongs to a family of phosphatidylinositol kinase-related kinases. These kinases mediate cellular responses to stresses such as DNA damage and nutrient deprivation. 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]

Other Designations

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

Publication Reference

- [Thr2446 is a novel mammalian target of rapamycin \(mTOR\) phosphorylation site regulated by nutrient status.](#)

Cheng SW, Fryer LG, Carling D, Shepherd PR.

The Journal of Biological Chemistry 2004 Apr; 279(16):15719.

Application: WB-Ce, Mouse, CHO-IR cells, H2K myoblasts

- [mTOR-dependent regulation of ribosomal gene transcription requires S6K1 and is mediated by phosphorylation of the carboxy-terminal activation domain of the nucleolar transcription factor UBF.](#)

Hannan KM, Brandenburger Y, Jenkins A, Sharkey K, Cavanaugh A, Rothblum L, Moss T, Poortinga G, McArthur GA, Pearson RB, Hannan RD.

Molecular and Cellular Biology 2003 Dec; 23(23):8862.

- [Alcohol impairs leucine-mediated phosphorylation of 4E-BP1, S6K1, eIF4G, and mTOR in skeletal muscle.](#)

Lang CH, Frost RA, Deshpande N, Kumar V, Vary TC, Jefferson LS, Kimball SR.

American Journal of Physiology. Endocrinology and Metabolism 2003 Aug; 285(6):E1205.

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](#)