

ARG54727 anti-mTOR antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes mTOR
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Target Name	mTOR
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 2459-2488 of Human mTOR (NP_004949.1).
Conjugation	Un-conjugated
Alternate Names	Mammalian target of rapamycin; RAFT1; Mechanistic target of rapamycin; Rapamycin target protein 1; FRAP1; FRAP2; Rapamycin and FKBP12 target 1; FK506-binding protein 12-rapamycin complex-associated protein 1; mTOR; RAPT1; FKBP12-rapamycin complex-associated protein; FRAP; Serine/threonine-protein kinase mTOR; EC 2.7.11.1

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:10 - 1:50
	IHC-P	Assay-dependent
	WB	1:500 - 1:1000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

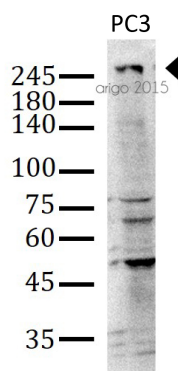
Properties

Purification	Protein A purified
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

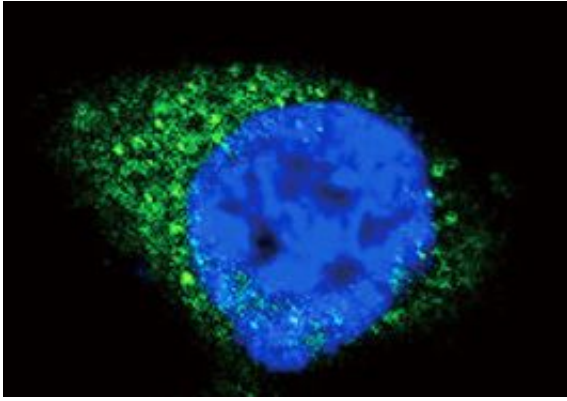
Database links	GeneID: 2475 Human Swiss-port # P42345 Human
Gene Symbol	MTOR
Gene Full Name	mechanistic target of rapamycin (serine/threonine kinase)
Background	The protein encoded by this gene belongs to a family of phosphatidylinositol kinase-related kinases. These kinases mediate cellular responses 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, Sep 2008]
Function	Serine/threonine protein kinase which is a central regulator of cellular metabolism, growth and survival in response to hormones, growth factors, nutrients, energy and stress signals. MTOR directly or indirectly regulates the phosphorylation of at least 800 proteins. [From Uniprot]
Highlight	Related products: mTOR antibodies: mTOR Duos / Panels: Related news: Baking soda restores circadian clock in tumor cells
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Gene Regulation antibody; Metabolism antibody
Calculated Mw	289 kDa
PTM	Autophosphorylates when part of mTORC1 or mTORC2. Phosphorylation at Ser-1261, Ser-2159 and Thr-2164 promotes autophosphorylation. Phosphorylation in the kinase domain modulates the interactions of MTOR with RPTOR and PRAS40 and leads to increased intrinsic mTORC1 kinase activity. Phosphorylation at Thr-2173 in the ATP-binding region by AKT1 strongly reduces kinase activity.
Cellular Localization	Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side. Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side. Mitochondrion outer membrane; Peripheral membrane protein; Cytoplasmic side. Lysosome Cytoplasm. Nucleus, PML body Note=Shuttles between cytoplasm and nucleus. Accumulates in the nucleus in response to hypoxia (By similarity). Targeting to lysosomes depends on amino acid availability and RRAGA and RRAGB

Images



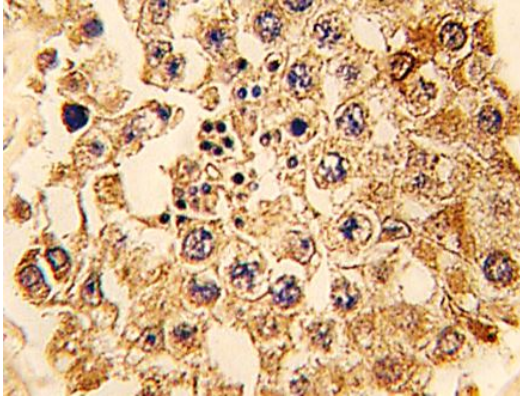
ARG54727 anti-mTOR antibody WB image

Western blot: 30 µg of PC3 cell lysate stained with ARG54727 anti-mTOR antibody at 1:1000 dilution.



ARG54727 anti-mTOR antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG54727 anti-mTOR antibody. DAPI (blue) for nuclear staining.



ARG54727 anti-mTOR antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human testis tissue stained with ARG54727 anti-mTOR antibody.
