DATASHEET

mTOR (Phospho-S2481) Rabbit Monoclonal Antibody(C1169)

CAT. NO. AMA00781

KEY FEATURES

Target	mTOR (Phospho-S2481)	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

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 . Functions as part of 2 structurally and functionally distinct signaling complexes mTORC1 and mTORC2 (mTOR complex 1 and 2) . In response to nutrients, growth factors or amino acids, mTORC1 is recruited to the lysosome membrane and promotes protein, lipid and nucleotide synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis . This includes phosphorylation of EIF4EBP1 and release of its inhibition toward the elongation initiation factor 4E (eiF4E) .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to mTOR (Phospho-S2481)
Specificity	Recognizes endogenous levels of mTOR protein only when phosphorylated at S2481
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S2481 of human mTOR protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 288 kD; Observed: 289 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	FRAP; FRAP1; FRAP2; RAFT1; RAPT1; Serine/threonine-protein kinase mTOR; FK506-binding protein 12-rapamycin complex-associated protein 1; FKBP12-rapamycin complex-associated protein; Mammalian target of rapamycin; mTOR; Mechanistic target of rapamycin; Rapamycin and FKBP12 target 1; Rapamycin target protein 1
Gene Symbol	MTOR
Entrez Gene	2475(Human); 56717(Mouse); 56718(Rat)
SwissProt	P42345(Human); Q9JLN9(Mouse); P42346(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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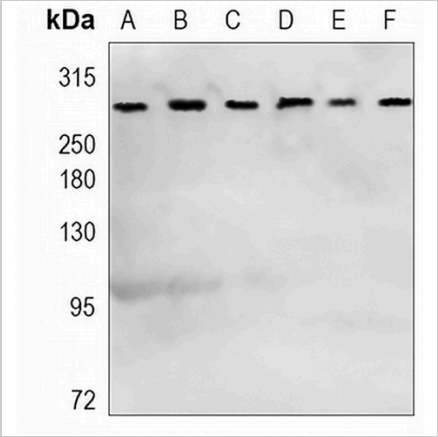

Western blot analysis of mTOR (Phospho-S2481) expression in K562 (A), THP1 (B), mouse liver (C), mouse muscle (D), rat liver (E), rat muscle (F) whole cell lysates. (Predicted band size: 288 kD; Observed band size: 289 kD)

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.