

Cat. No:	AB-82763
Conjugate:	Unconjugated
Size:	100 ug
Clone:	Poly
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu, Ms, Rt
Applications:	Western Blot: 1:500 - 1:2000. Immunohistochemistry: 1:100 - 1:300. Immunofluorescence: 1:200 - 1:1000. ELISA: 1:40000.
Molecular Weight:	289 kDa
Purification:	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser2448 of human mTOR. Antibodies are purified by protein A and peptide affinity chromatography.
Background:	The mammalian target of rapamycin (mTOR, FRAP, RAFT) is a Ser/Thr protein kinase (1-3) that functions as an ATP and amino acid sensor to balance nutrient availability and cell growth (4,5). When sufficient nutrients are available, mTOR responds to a phosphatidic acid-mediated signal to transmit a positive signal to p70 S6 kinase and participate in the inactivation of the eIF4E inhibitor, 4E-BP1 (6). These events result in the translation of specific mRNA subpopulations. mTOR is phosphorylated at Ser2448 via the PI3 kinase/Akt signaling pathway and autophosphorylated at Ser2481 (7,8). mTOR plays a key role in cell growth and homeostasis and may be abnormally regulated in tumors. For these reasons, mTOR is currently under investigation as a potential target for anticancer therapy (9). PhosphomTOR (Ser2448) Antibody detects endogenous levels of mTOR only when phosphorylated at Ser2448.
Form:	liquid
Buffer:	Supplied in PBS containing 50% glycerol , 0,5% BSA and 0,02% sodium Azdide
Storage:	Store at -20°C. Do not aliquot the antibody.

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