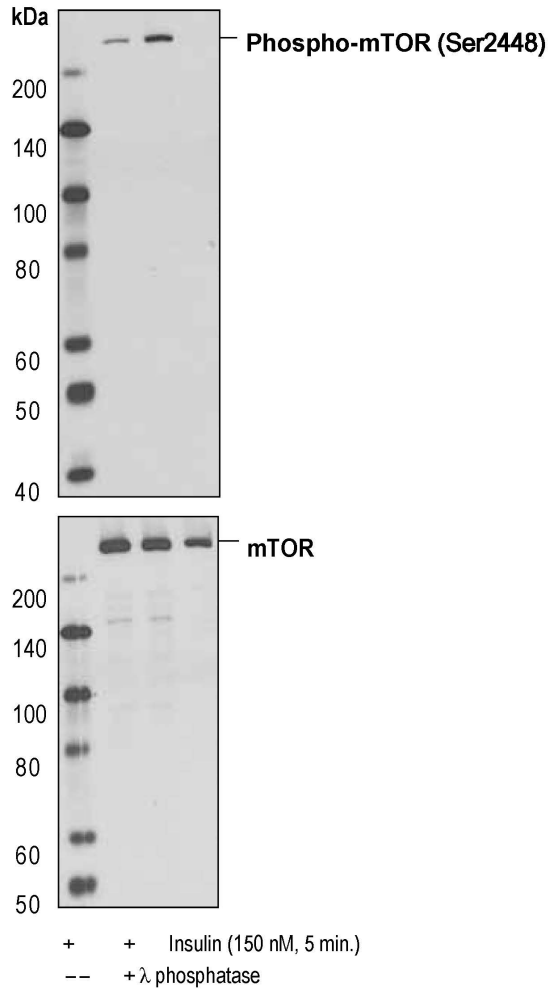


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<b>Product name:</b>	Phospho-mTOR (S2448)
<b>Cat number:</b>	MAB-94141
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100 ug
<b>Clone:</b>	D9C2
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Rb
<b>Isotype:</b>	IgG
<b>Reactivity:</b>	Hu, Ms, Rt
<b>Applications:</b>	Western blotting 1:1000 Immunohistochemistry 1:100 Immunofluorescence (IF-IC) 1:200
<b>Molecular Weight:</b>	290 kDa
<b>Purification:</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser2448 of human mTOR protein.
<b>Form:</b>	Liquid
<b>Buffer:</b>	Supplied in PBS containing 50% glycerol ,0.5% BSA and 0.2% sodium Azide
<b>Storage:</b>	Store at -20°C. Do not aliquot the antibody.
<b>Background:</b>	<p>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 anti-cancer therapy (9). Phospho-mTOR (Ser2448) Rabbit mAb detects endogenous levels of mTOR protein only when phosphorylated at Ser2448.</p>



Western blot analysis of extracts from serum-starved NIH/3T3 cells, untreated or insulin-treated (150 nM, 5 minutes), alone or in combination with  $\lambda$ -phosphatase, using Phospho-mTOR (Ser2448) (D9C2) Rabbit mAb (upper) or mTOR (7C10) Rabbit mAb.