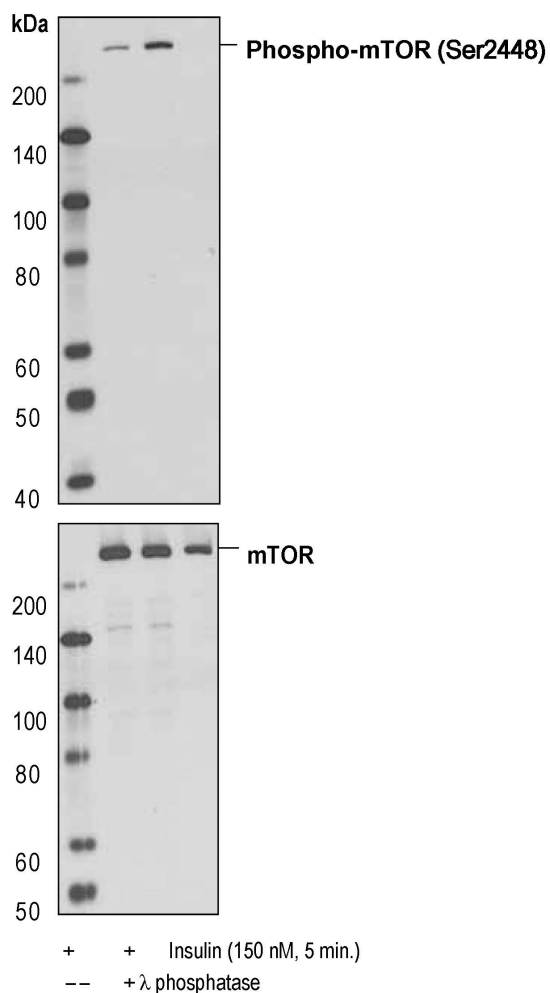


Product name:	Phospho-mTOR (S2448)
Cat number:	MAB-94141
Conjugate:	Unconjugated
Size:	100 ug
Clone:	D9C2
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu, Ms, Rt
Applications:	Western blotting 1:1000 Immunohistochemistry 1:100 Immunofluorescence (IF-IC) 1:200
Molecular Weight:	290 kDa
Purification: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



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