



Phospho-MTOR-S2448 Polyclonal Antibody

E9P009

Catalog Number: E9P0094**Amount:** 100ul

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).

Species: Rabbit**Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: MTOR;FLJ44809;FRAP;FRAP1;FRAP2;RAFT1;RAPT1;

Immunogen: A phospho specific peptide corresponding to residues surrounding serine 2448of human mTOR/FRAP

Purification: Affinity purification**Reactivity:** H**Applications:** WB IHCICC**Molecular Weight:****Swiss-Prot No. :** P42345**Gene ID:** 2475

References: 1. Sabers, C.J. et al. (1995) J Biol Chem 270, 815-22. 2. Brown, E.J. et al. (1994) Nature 369, 756-8. 3. Sabatini, D.M. et al. (1994) Cell 78, 35-43. 4. Gingras, A.C. et al. (2001) Genes Dev 15, 807-26. 5. Dennis, P.B. et al. (2001) Science 294, 1102-5. 6. Fang, Y. et al. (2001) Science 294, 1942-5. 7. Navé, B.T. et al. (1999) Biochem J 344 Pt 2, 427-31. 8. Peterson, R.T. et al. (2000) J Biol Chem 275, 7416-23. 9. Huang, S. and Houghton, P.J. (2003) Curr Opin Pharmacol 3, 371-7.

For Research Use Only

WB 1:500 - 1:2000

IHC 1:50- 1:100

ICC 1:50- 1:200

Western blot analysis of extracts of 293Tcell line, using
p-MTOR-S2448 antibody.

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