SignalChem
Specialists in Signaling Proteins
1-866-9 KINASE (54-6273)

Catalog #	Aliquot Size
F17-65R-100	100 µg

Anti-phospho-mTOR (Ser2448)

Rabbit Polyclonal Antibody

Catalog # F17-65R
Lot # Z2014-25

Cited Applications
IHC

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity
Recognizes the mTOR protein phosphorylated at serine 2448

Cross Reactivity
Human, Mouse and Rat

Host/Isotype/Clone#
Rabbit, IgG

Immunogen
The antiserum was produced against synthesized phosphopeptide derived from human mTOR around the phosphorylation site of serine 2448 (T-D-SP-Y-S).

Formulation
Phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Stability
1yr at –20°C from date of shipment

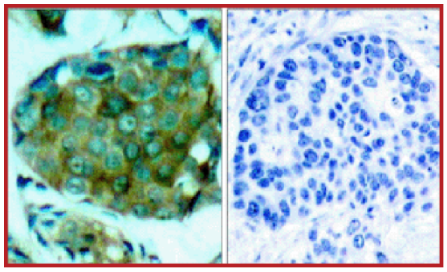
Scientific Background

The mammalian target of rapamycin, mTOR, also known as FRAP or RAFT, is a Ser/Thr protein kinase. mTOR acts as a sensor for ATP and amino acids, balancing the availability of nutrients and cell growth (1). When sufficient nutrients are available, mTOR responds to a phosphatidic acid-mediated signal, transmits a positive signal to p70 S6 kinase and participates in the inactivation of the eIF4E inhibitor, 4E-BP1 (2).

References

1. Sabers CJ et al: Isolation of a protein target of the FKBP12-rapamycin complex in mammalian cells. J Biol Chem. 270(2): 815-22, 1995.
2. Fang Y. et al: Phosphatidic acid-mediated mitogenic activation of mTOR signaling. Science. 294(5548): 1942-5, 2001.
3. Holz MK, et,al. (2005) J Biol Chem ;280:26089-26093.
4. Chiang GG, et,al. (2005) J Biol Chem ;280: 25485-25490.
5. Mothe-Satney I, et,al. (2004) J Biol Chem ;279: 42628-42637.
6. Bolster DR, et,al. (2003) J Physiol ;553:213-220.

Sample Data



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Anti-phospho-mTOR (Ser2448).

Anti-phospho-mTOR (Ser2448)

Rabbit Polyclonal Antibody

Catalog #	F17-65R
Lot #	Z2014-25
Purification	Affinity chromatography
Stability	1yr at –20°C from date of shipment
Storage & Shipping	Store product at –20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
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