

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

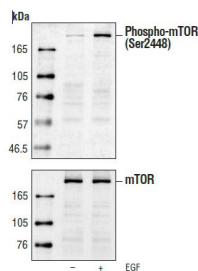
Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser2448 of human mTOR. Antibodies are purified by protein A and peptide affinity chromatography.

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.

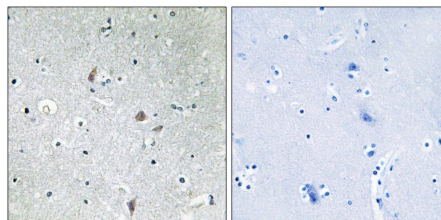
Form: liquid

Buffer: Supplied in PBS containing 50% glycerol , 0,5% BSA and 0,02% sodium Azdide

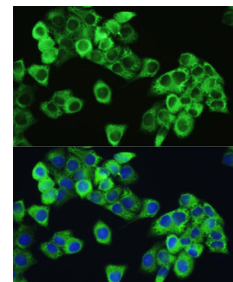
Storage: Store at -20°C. Do not aliquot the antibody.



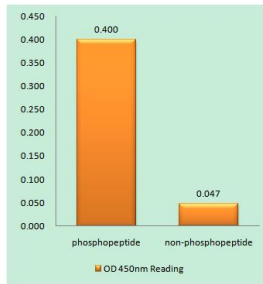
Western blot analysis of extracts from 293 cells (starved for 16 hours) untreated or EGF-treated (100 ng/ml), using PhosphomTOR (Ser2448) Antibody (upper) or control mTOR Antibody (lower).



Immunohistochemistry analysis of paraffin-embedded human brain, using mTOR (Phospho-Ser2448) Antibody. The picture on the right is blocked with the phospho peptide.



Immunofluorescence analysis of HeLa cells using Phospho-MTOR-S2448 antibody at dilution of 1:100. Blue: DAPI for nuclear staining.



Enzyme-Linked Immunosorbent Assay
(Phospho-ELISA) for Immunogen
Phosphopeptide (Phospho-left) and Non-
Phosphopeptide (Phospho-right), using
Mtor (Phospho-Ser2448) Antibody

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