

mTOR Antibody

The mammalian target of rapamycin (mTOR) plays a key role in cell growth and homeostasis and may be abnormally regulated in tumors. mTOR is a Ser/Thr protein kinase that functions as an ATP and amino acid sensor to balance nutrient availability and cell growth. In the presence of sufficient nutrients, activation of mTOR leads to stimulation of p70 S6 kinase and inactivation of the eIF4E inhibitor, 4E-BP1. These events result in the translation of specific mRNA subpopulations. mTOR is currently under investigation as a potential target for anti-cancer and anti-aging therapy as well as treatment of diabetes.

Catalog Number: E1S0004-1, E1S0004-2

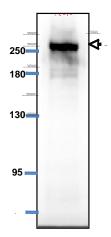
Quantity: 50ug/50uL, 100ug/100uL

Specificity/Sensitivity: mTOR antibody detects cellular levels of total mTOR on Western analysis, and has very little cross reaction with other proteins.

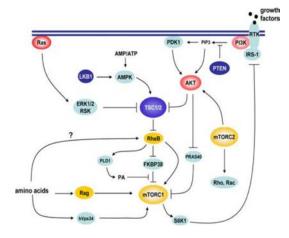
Source/Purification: Polyclonal antibodies are produced by immunizing rabbits with a synthetic peptide corresponding to a stretch of amino acid residues of human mTOR. Antibodies are purified by protein A chromatography.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
WB, IP	H, Mu, R, Monkey	289	Rabbit Polyclonal

* Based on sequence homology



Western blot analysis of protein extracts from 293 cells overexpressing a mouse mTOR cDNA. The primary antibody was diluted 1:2000 before applied to the blotting membrane. (Right Panel: a schematic illustration of mTOR signaling pathway.



Recommended Antibody Dilutions: **Immuoprecipitation**: 1:100-200;

Western Blotting: 1:1,000-2,000. Antibody diluent: PBST-5% non-fat milk or BSA. Storage condition: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Stable for at least 6-months if stored at -20° C.