

**mTOR (Ser2481) polyclonal antibody**

Catalog: BCP01142

Host: Rabbit

Reactivity: Human,Rat

**BackGround:**

The mammalian target of rapamycin (mTOR, FRAP, RAFT) is a Ser/Thr protein kinase that functions as an ATP and amino acid sensor to balance nutrient availability and cell growth. 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. 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. 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.

**Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

**Molecular Weight:**

~ 289 kDa

**Swiss-Prot:**

P42345

**Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

**Applications:**

WB: 1:500~1:1000

IHC: 1:50~1:200

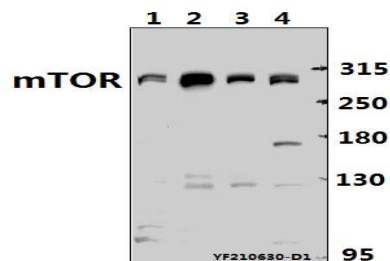
IF: 1:50~1:200

**Storage&Stability:**

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

**Specificity:**

mTOR (Ser2481) polyclonal antibody detects endogenous levels of mTOR protein.

**DATA:**

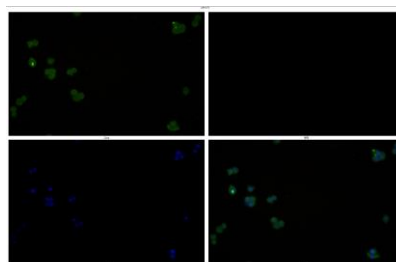
Western blot (WB) analysis of mTOR (Ser2481) polyclonal antibody at 1:500 dilution

Lane1:C6 whole cell lysate(40ug)

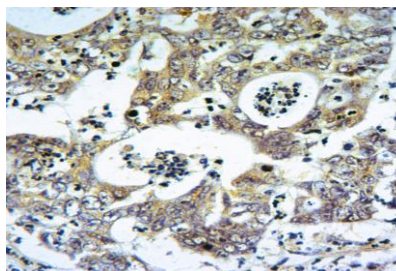
Lane2:HEK293T whole cell lysate(40ug)

Lane3:MCF-7 whole cell lysate(40ug)

Lane4:Hela whole cell lysate(40ug)



Immunofluorescence analysis of MCF-7 cells using mTOR (Ser2481) antibody at dilution of 1:50.



Immunohistochemistry of paraffin-embedded Human Colorectal cancer using mTOR (Ser2481) antibody at dilution of 1:50.

**Note:**

For research use only, not for use in diagnostic procedure.