

## Product datasheet for **TA392533S**

### MTOR Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:500~1:1000 IHC: 1:50~1:200 IF: 1:50~1:200
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to Human mTOR.
Specificity:	mTOR (Ser2481) polyclonal antibody detects endogenous levels of mTOR protein.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 289 kDa
Gene Name:	mechanistic target of rapamycin
Database Link:	<a href="#">Entrez Gene 2475 Human P42345</a>

**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.

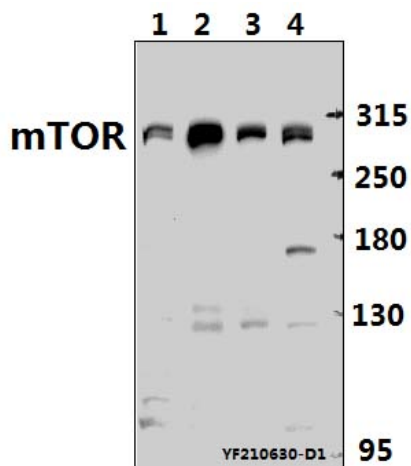


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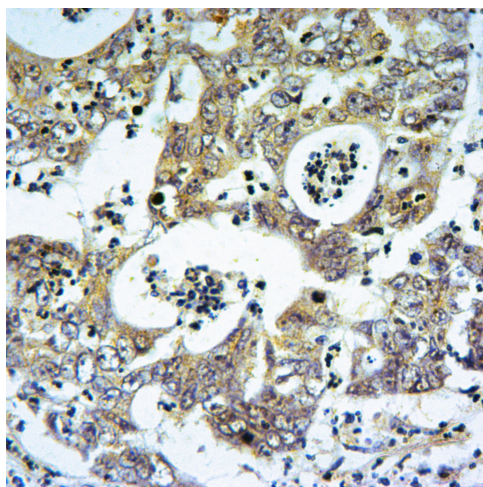
**Synonyms:** FK506-binding protein 12-rapamycin complex-associated protein 1; FKBP12-rapamycin complex-associated protein; FRAP; FRAP1; FRAP2; Mammalian target of rapamycin; Mechanistic target of rapamycin; MTOR; mTOR; RAFT1; Rapamycin and FKBP12 target 1; Rapamycin target protein 1; RAPT1; Serine/threonine-protein kinase mTOR

**Note:** For research use only, not for use in diagnostic procedure.

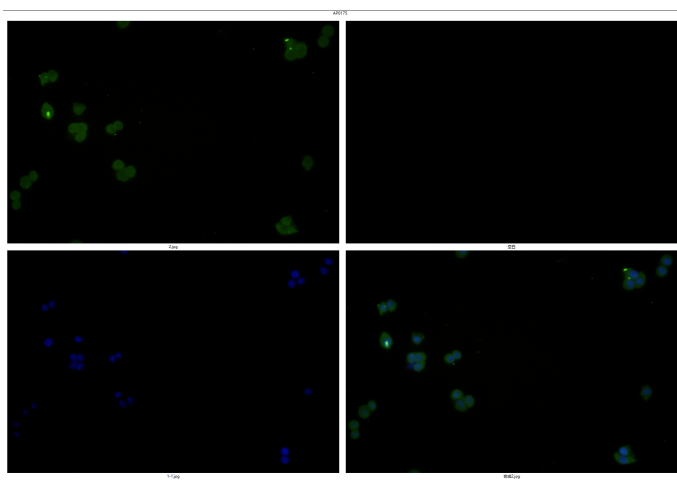
**Product images:**



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)



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



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