#### For Research Use Only

# CoraLite®594-conjugated mTOR Monoclonal antibody



**Purification Method:** 

Protein A purification

Recommended Dilutions:

Excitation/Emission maxima

IF/ICC 1:50-1:500

wavelengths: 588 nm / 604 nm

CloneNo.:

1G11A3

Catalog Number: CL594-66888

2 Publications

**Basic Information** 

Catalog Number: CL594-66888

Source:
Mouse

Isotype: IgG2a

Immunogen Catalog Number:

AG28395

GenBank Accession Number:

NM\_004958 GeneID (NCBI): 2475

**UNIPROT ID:** 

P42345
Full Name:
FK506 binding protein 12-rapamycin

associated protein 1
Calculated MW:

289 kDa Observed MW: 250-289 kDa

Positive Controls:

IF/ICC: HepG2 cells,

**Applications** 

Tested Applications:

Cited Applications:

IF

Species Specificity: Human, Mouse, Rat Cited Species: human, mouse

### **Background Information**

MTOR, also named as FRAP1, FRAP, FRAP2 and RAPT1, belongs to the PI3/PI4-kinase family. MTOR is a Ser/Thr protein kinase that functions as an ATP and amino acid sensor to balance nutrient availability and cell growth. MTOR is kinase subunit of both mTORC1 and mTORC2, which regulate cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. mTORC2 is also activated by growth factors, but seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. MTOR has a calculated molecular mass of 289 kDa, and always can be detected at about 250 kDa due to some modifications (PMID: 14578359).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Shuo Geng	37961551	bioRxiv	IF
Margot R F Reijnders	37057673	Genet Med	IF

Storage

Storage:

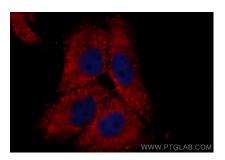
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CoraLite®594 mTOR antibody (CL594-66888, Clone: 1G11A3) at dilution of 1:200.