For Research Use Only

CoraLite® Plus 488-conjugated mTOR Polyclonal antibody



Purification Method:

IF/ICC 1:200-1:800

wavelengths: 493 nm / 522 nm

Antigen affinity purification

Excitation/Emission maxima

Recommended Dilutions:

Catalog Number: CL488-28273

Featured Product

Basic Information

Catalog Number: CL488-28273

Size: 1000 µg/ml Source: Rabbit

Isotype:

Immunogen Catalog Number:

AG28395

Species Specificity:

Tested Applications: IF/ICC, FC (Intra) Positive Controls:

FK506 binding protein 12-rapamycin

GenBank Accession Number:

NM 004958

UNIPROT ID:

Full Name:

associated protein 1

Calculated MW: 289 kDa Observed MW: 250-289 kDa

P42345

GeneID (NCBI):

IF/ICC : HeLa cells,

Background Information

Applications

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).

Storage

Storage:

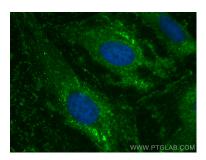
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

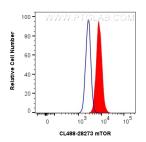
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using CoraLite® Plus 488 mTOR antibody (CL488-28273) at dilution of 1:200.



1X10^6 HeLa cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human mTOR (CL488-28273) (red), or 0.8 ug CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000, Clone:) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).