

Phospho-MTOR (S2448) Recombinant Antibody



RACO0130

Product Information

Size:

50ul

Reactivity:

Human

Source:

Human

Isotype:

Rabbit IgG

Applications:

ELISA, WB, IHC, IF

Recommended dilutions:

WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200

Protein Background:

Serine/threonine protein kinase which is a central regulator of cellular metabolism, growth and survival in response to hormones, growth factors, nutrients, energy and stress signals. MTOR directly or indirectly regulates the phosphorylation of at least 800 proteins. Functions as part of 2 structurally and functionally distinct signaling complexes mTORC1 and mTORC2 (mTOR complex 1 and 2). Activated mTORC1 up-regulates protein synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis. This includes phosphorylation of EIF4EBP1 and release of its inhibition toward the elongation initiation factor 4E (eIF4E). Moreover, phosphorylates and activates RPS6KB1 and RPS6KB2 that promote protein synthesis by modulating the activity of their downstream targets including ribosomal protein S6, eukaryotic translation initiation factor EIF4B, and the inhibitor of translation initiation PDCC4.

Gene ID:

MTOR

Uniprot

P42345

Synonyms:

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

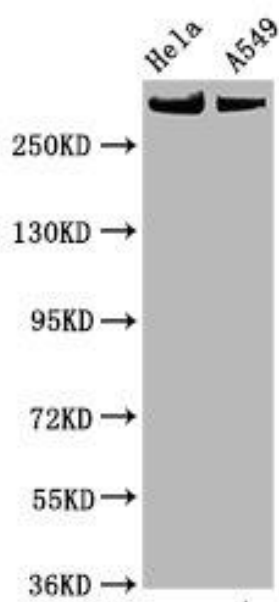
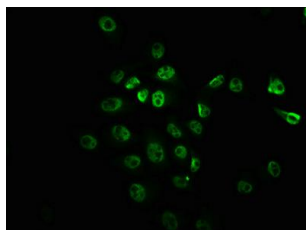
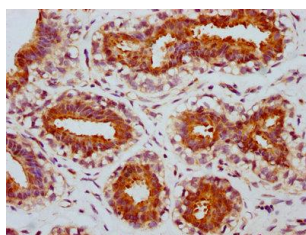
Immunogen:

A synthesized peptide derived from human Phospho-MTOR (S2448).

Storage:

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Product Images



IHC image of RACO0130 diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

Immunofluorescence staining of HeLa cells with RACO0130 at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Western Blot

Positive WB detected in (HeLa whole cell lysate) A549 whole cell lysate)

All lanes: Phospho-MTOR antibody at 0.825µg/ml

Secondary

Goat polyclonal to rabbit IgG at 1:50000 dilution

Predicted band size: 289 KDa

Observed band size: 289 KDa