

Raptor Antibody

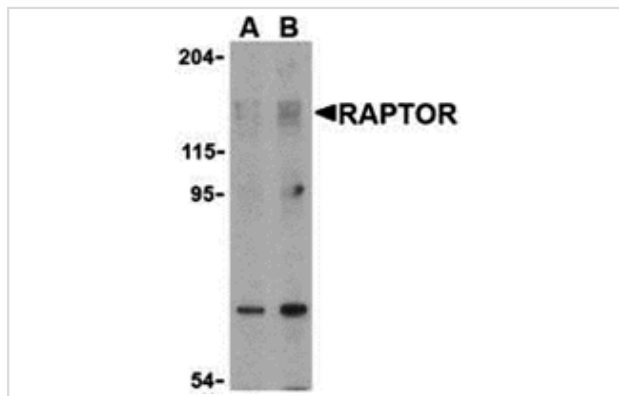
Catalog No: #24303

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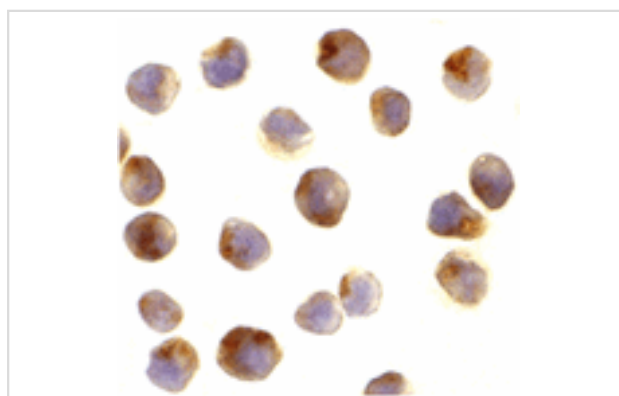
Description

Product Name	Raptor Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	E WB ICC
Species Reactivity	Hu Ms
Specificity	Raptor has multiple isoforms that may also be recognized by antibody.
Immunogen Type	Peptide
Immunogen Description	Raised against a 13 amino acid peptide from near the amino-terminus of human Raptor.
Target Name	Raptor
Accession No.	Q8N122
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Images



Western blot analysis of Raptor in L1210 cell lysate with Raptor antibody at (A) 2 and (B) 4 ug/mL.



Immunocytochemistry of RAPTOR in L1210 cells with RAPTOR antibody at 10 ug/mL.

Background

The mammalian Target of Rapamycin (TOR, also known as mTOR) is an evolutionarily conserved serine/threonine kinase that regulates cell growth and cell cycle through its ability to integrate signals from nutrient levels and growth factors. Rapamycin inhibits TOR activity resulting in reduced cell growth and reduced rates of cell cycle and cell proliferation. Raptor (regulatory associated protein of TOR) is a TOR-binding protein essential for TOR signaling in vivo. It acts as a TOR scaffold protein whose binding by TOR substrates is necessary for effective TOR-catalyzed phosphorylation. These substrates include the ribosomal protein S6 kinase (RP S6K) and the eukaryotic initiation factor 4E binding protein 4EBP1, proteins necessary for cell growth and proliferation and responsive to nutrient and mitogen levels. Raptor binds these proteins through a common 5 amino acid TOR-signaling (TOS) motif; mutation of this motif prevents the TOR-dependent phosphorylation of these proteins.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.