



RPTOR Monoclonal Antibody

Catalog No	YP-mAb-04926
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	RPTOR KIAA1303 RAPTOR
Immunogen	Synthesized peptide derived from human protein . at AA range: 730-810
Specificity	RPTOR Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	KIAA1303;p150 target of rapamycin;Regulatory-associated protein of mTOR; RPTOR;TOR;Raptor;RPTOR KIAA1303 RAPTOR;Regulatory-associated protein of mTOR (Raptor) (p150 target of rapamycin (TOR)-scaffold protein)
Observed Band	146kD
Calculated Molecular Weight	146kD
Cell Pathway	Cytoplasm. Lysosome. Cytoplasmic granule . Targeting to lysosomes depends on amino acid availability. In arsenite-stressed cells, accumulates in stress granules when associated with SPAG5 and association with lysosomes is drastically decreased.
Tissue Specificity	Highly expressed in skeletal muscle, and in a lesser extent in brain, lung, small intestine, kidney and placenta. Isoform 3 is widely expressed, with highest levels in nasal mucosa and pituitary and lowest in spleen.
Function	function:Participates in the FRAP1 pathway and associates in a near stoichiometric ratio with FRAP1 to form a nutrient-sensitive complex (NSC). Plays a pivotal role as a scaffold protein in the FRAP1-signaling pathway and this interaction is essential for the catalyzed phosphorylation of EIF4EBP1. Has a positive role in nutrient-stimulated signaling to the downstream effector RPS6KB1. Under nutrient-deprived conditions, serves as a negative regulator of



FRAP1 kinase activity. Regulation of the interaction with FRAP1 is a critical mechanism by which cells coordinate the rate of cell growth and maintenance of cell size with different environmental conditions. Rapamycin destabilizes the interaction with FRAP1 regardless of nutrient availability, and its potency for dissociation is increased under nutrient-rich conditions. This action uncouples FRAP1 from its substrates, and in

Background

This gene encodes a component of a signaling pathway that regulates cell growth in response to nutrient and insulin levels. The encoded protein forms a stoichiometric complex with the mTOR kinase, and also associates with eukaryotic initiation factor 4E-binding protein-1 and ribosomal protein S6 kinase. The protein positively regulates the downstream effector ribosomal protein S6 kinase, and negatively regulates the mTOR kinase. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2009],

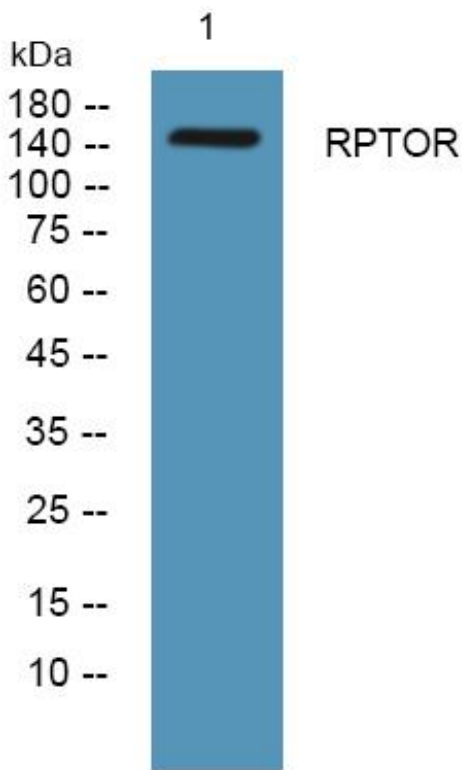
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using RPTOR Monoclonal Antibody