

Rabbit anti-Human Phospho-Raptor (S863) Polyclonal Antibody | anti-RPTOR antibody

Phospho-Raptor (S863) Antibody

CATALOG # AAA289679	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Dot Blot
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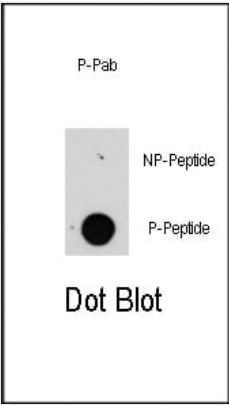
PRODUCT SYNONYMS

Phospho-Raptor (S863); Polyclonal Antibody; Phospho-Raptor (S863) Antibody; Regulatory-associated protein of mTOR; Raptor; p150 target of rapamycin (TOR)-scaffold protein; RPTOR; KIAA1303; RAPTOR; anti-RPTOR antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This Raptor Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S863 of human Raptor.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Applicable Applications for anti-RPTOR antibody	ELISA, DB (Dot Blot)
Function	Involved in the control of the mammalian target of rapamycin complex 1 (mTORC1) activity which regulates cell growth and survival, and autophagy in response to nutrient and hormonal signals; functions as a scaffold for recruiting mTORC1 substrates. mTORC1 is activated in response to growth factors or amino acids. Growth factor-stimulated mTORC1 activation involves a AKT1- mediated phosphorylation of TSC1-TSC2, which leads to the activation of the RHEB GTPase that potentially activates the protein kinase activity of mTORC1. Amino acid-signaling to mTORC1 requires its relocalization to the lysosomes mediated by the Ragulator complex and the Rag GTPases. Activated mTORC1 up-regulates protein synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis. mTORC1 phosphorylates EIF4EBP1 and releases it from inhibiting the elongation initiation factor 4E (eIF4E). mTORC1 phosphorylates and activates S6K1 at 'Thr-389', which then promotes protein synthesis by phosphorylating PDCD4 and targeting it for degradation. Involved in ciliogenesis.
Cellular Location	Cytoplasm. Lysosome. Cytoplasmic granule. Note=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 Location	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.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



DB (Dot Blot)
Dot blot analysis of anti-raptor-pS863 Pab (RB13350) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

ADDITIONAL INFORMATION

Related Product Information for anti-RPTOR antibody	Raptor participates in the FRAP1 pathway and associates in a near stoichiometric ratio with FRAP1 to form a nutrient-sensitive complex (NSC). It plays a pivotal role as a scaffold protein in the FRAP1-signaling pathway and this interaction is essential for the catalyzed phosphorylation of EIF4EBP1. It has a positive role in nutrient-stimulated signaling to the downstream effector RPS6KB1. Under nutrient-deprived conditions, raptor 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.
Product Categories/Family for anti-RPTOR antibody	Cell Biology; Signal Transduction; Phospho Antibodies
References	Wang,Y., Circ. Res. 101 (6), 560-569 (2007) Fuchs,B.C., Am. J. Physiol., Cell Physiol. 293 (1), C55-C63 (2007) Olsen,J.V., Cell 127 (3), 635-648 (2006)

NCBI AND UNIPROT INFORMATION

NCBI GI #	22094987
NCBI GeneID	57521
NCBI Accession #	NP_065812.1
NCBI GenBank Nucleotide #	NM_020761.2
UniProt Accession #	Q8N122; Q8N4V9; Q8TB32; Q9P2P3; B2RN36; C6KEF2; F5H7J5
Molecular Weight	149038
NCBI Official Full Name	regulatory-associated protein of mTOR isoform 1
NCBI Official Synonym Full Names	regulatory associated protein of MTOR, complex 1
NCBI Official Symbol	RPTOR
NCBI Official Synonym Symbols	KOG1; Mip1
NCBI Protein Information	regulatory-associated protein of mTOR
UniProt Protein Name	Regulatory-associated protein of mTOR
UniProt Gene Name	RPTOR
UniProt Synonym Gene Names	KIAA1303; RAPTOR; Raptor

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/phospho-raptor-s863-antibody-dot-blot-elisa/289679>