

Anti-RPTOR Antibody

Catalog Number: M01463-1

About RPTOR

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 potently 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.

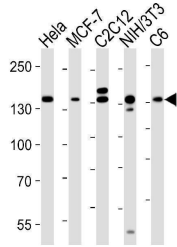
Overview

Product Name	Anti-RPTOR Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-RPTOR Antibody (Catalog # M01463-1). Tested in IHC-P, WB application(s). This antibody reacts with Human, Mouse, Rat.
Application	IHC-P, WB
Clonality	Monoclonal 1411CT316.2.151.34
Formulation	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Storage Instructions	Maintain refrigerated at 2-8°C for up to 2 weeks. For long-term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.
Host	Mouse
Uniprot ID	Q8N122

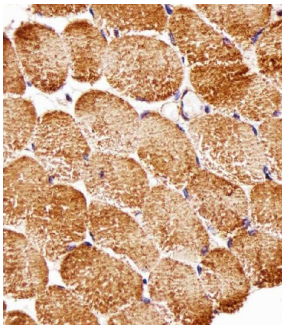
Technical Details

Immunogen	This RPTOR antibody is generated from a mouse immunized with recombinant protein.
Predicted Reactive Species	Bovine, Chicken, Horse, Monkey, Pig, Sheep, Xenopus
Isotype	IgG1,k
Purification	This antibody is purified through a protein G column, followed by dialysis against PBS.
Suggested Dilutions	WB: 1:500-1:1000 IHC-P: 1:25

Anti-RPTOR Antibody (M01463-1) Images



Western blot analysis of lysates from HeLa, MCF-7, mouse C2C12, mouse NIH/3T3, rat C6 cell line (from left to right), using RPTOR Antibody. M01463-1 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Immunohistochemical analysis of paraffin-embedded H. skeletal muscle section using RPTOR Antibody. M01463-1 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Submit a product review to [Biocompare.com](https://www.biocompare.com)

Submit a review of this product to [Biocompare.com](https://www.biocompare.com) to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-RPTOR Antibody

For Research Use Only. Not for use in diagnostic procedures.