

## 10-6624: Mouse Monoclonal Antibody to RPTOR (Clone: 1411CT316.2.151.34)(Discontinued)

|                           |   |
|---------------------------|---|
| <b>Clonality :</b>        | Monoclonal  |
| <b>Clone Name :</b>       | 1411CT316.2.151.34  |
| <b>Application :</b>      | WB,IHC-P  |
| <b>Reactivity :</b>       | Human,Mouse,Rat   |
| <b>Gene :</b>             | RPTOR   |
| <b>Gene ID :</b>          | 57521   |
| <b>Uniprot ID :</b>       | Q8N122  |
| <b>Format :</b>           | Purified  |
| <b>Alternative Name :</b> | Regulatory-associated protein of mTOR, Raptor, p150 target of rapamycin (TOR)-scaffold protein, RPTOR, KIAA1303, RAPTOR |
| <b>Isotype :</b>          | Mouse IgG1,Kappa  |

### Description

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.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 80 µl / 400 µl  |
| <b>Purification :</b>      | Protein G Chromatography  |
| <b>Content :</b>           | Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.   |
| <b>Storage condition :</b> | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term store at -20°C in small aliquots to prevent freeze-thaw cycles. |

### Application Note

IHC-P~1:25|| WB~1:500-1:1000

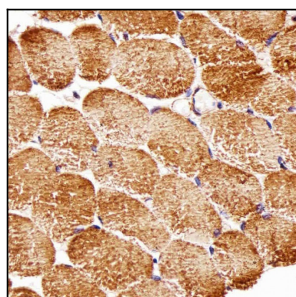


Figure 1: Immunohistochemical analysis of paraffin-embedded h skeletal muscle section using RPTOR Antibody (10-6624). RPTOR Antibody was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

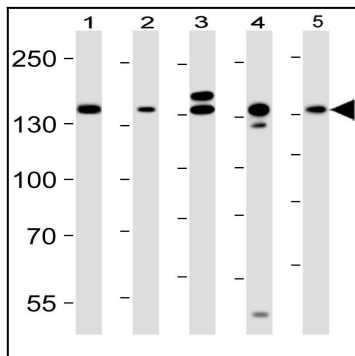


Figure 2: Western blot analysis of RPTOR Antibody (10-6624) with Lane 1: HeLa, Lane 2: MCF-7, Lane 3: mouse C2C12, Lane 4: mouse NIH/3T3, Lane 5: rat C6 cell line . RPTOR Antibody was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 $\mu$ g per lane.