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## anti-RAPTOR antibody

3 Images



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#### Overview

Quantity:	0.4 mL
Target:	RAPTOR
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This RAPTOR antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

#### **Product Details**

Immunogen:	This Raptor antibody was produced from a mouse immunized with recombinant protein.
Clone:	1411CT316-2-151-34
Isotype:	IgG1 kappa
Purification:	Purified

### **Target Details**

Target:	RAPTOR
Alternative Name:	Raptor (RAPTOR Products)
Background:	Raptor is 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. [UniProt]

UniProt:

Q8N122

Pathways:

Warburg Effect

#### **Application Details**

Application Notes:

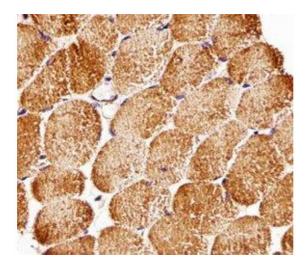
Titration of the RAPTOR antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. IHC (Paraffin): 1:25,Western blot: 1:500-1:1000

Restrictions:

For Research Use only

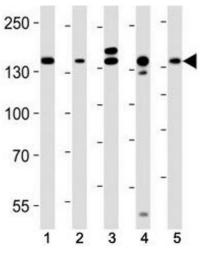
#### Handling

Format:	Liquid
Buffer:	In 1X PBS, pH 7.4, with 0.09 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Aliquot the Raptor antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.



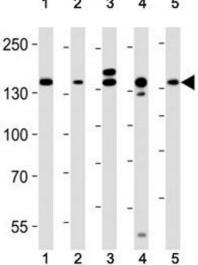
#### **Immunohistochemistry**

**Image 1.** Immunohistochemical analysis of paraffinembedded human skeletal muscle using Raptor antibody at 1:25 dilution.



#### **Western Blotting**

**Image 2.** Western blot analysis of lysate from (1) HeLa, (2) MCF-7, (3) mouse C2C12, (4) mouse NIH3T3, (5) rat C6 cell line using Raptor antibody at 1:1000. Predicted molecular weight  $\sim 149$  kDa.



#### **Western Blotting**

Image 3. Western blot analysis of lysate from (1) HeLa, (2) MCF-7, (3) mouse C2C12, (4) mouse NIH3T3, (5) rat C6 cell line using Raptor antibody at 1:1000. Predicted molecular weight  $\sim$  149 kDa.