Datasheet for ABIN6264641

anti-Raptor antibody (C-Term)

3 Images

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Overview

Quantity:	100 µL
Target:	Raptor (RPTOR)
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Raptor antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human Raptor, corresponding to a region within C-terminal amino acids.
Isotype:	IgG
Specificity:	Raptor Antibody detects endogenous levels of total Raptor.
Predicted Reactivity:	Pig,Zebrafish,Bovine,Horse,Sheep,Dog,Chicken
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	Raptor (RPTOR)

Target Details

Alternative Name:	RPTOR (RPTOR Products)
Background:	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. Gene: RPTOR
Molecular Weight:	149kDa
Gene ID:	57521
UniProt:	Q8N122
Pathways:	PI3K-Akt Signaling, RTK Signaling, AMPK Signaling, Regulation of Muscle Cell Differentiation, Regulation of Cell Size, Skeletal Muscle Fiber Development, Autophagy, BCR Signaling, Warburg Effect

Application Details

Application Notes:	WB 1:1000-3000, IHC 1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

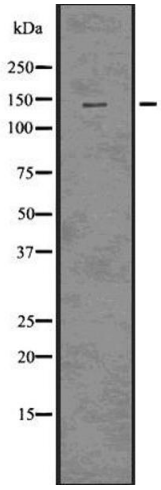
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide

Handling

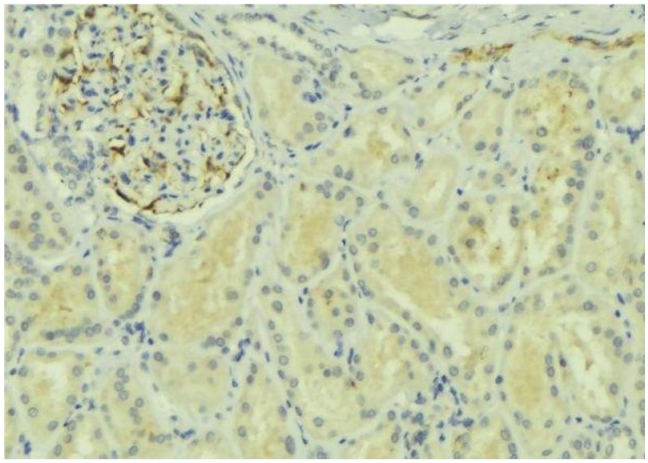
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



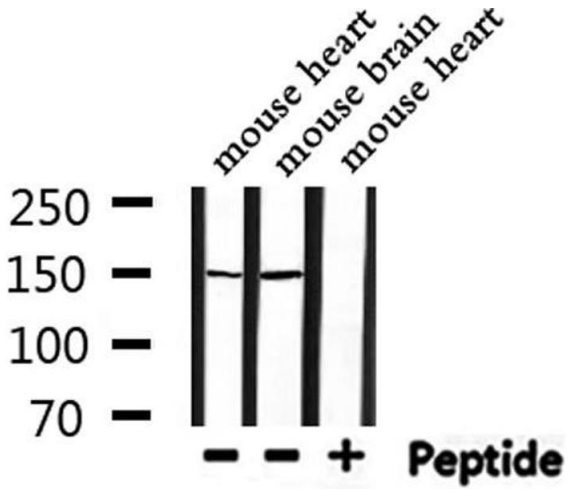
Western Blotting

Image 1. Western blot analysis of Raptor using HT-29 whole cell lysates



Immunohistochemistry

Image 2. ABIN6277740 at 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22¡ãC. An HRP conjugated goat anti-rabbit antibody was used as the secondary



Western Blotting

Image 3. Western blot analysis of extracts from mouse heart,mouse brain, using Raptor Antibody.

