

Datasheet for ABIN7127787

Recombinant anti-Raptor antibody[Go to Product page](#)**2** Images

Overview

Quantity:	100 µL
Target:	Raptor (RPTOR)
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This Raptor antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	A synthesized peptide derived from human Raptor
Clone:	1B10
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	Raptor (RPTOR)
Alternative Name:	RPTOR (RPTOR Products)
Background:	Background: Involved in the control of the mammalian target of rapamycin complex 1

Target Details

(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.

Aliases: Regulatory-associated protein of mTOR (Raptor) (p150 target of rapamycin (TOR)-scaffold protein), RPTOR, KIAA1303 RAPTOR

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: Recommended dilution: IHC:1:50-1:200,

Restrictions: For Research Use only

Handling

Format: Liquid

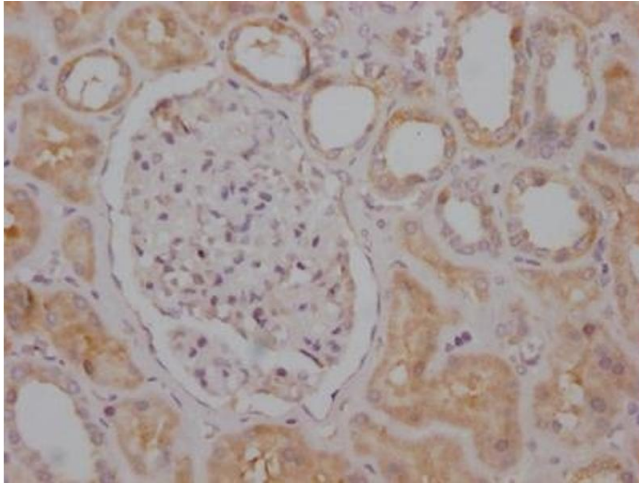
Buffer: Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

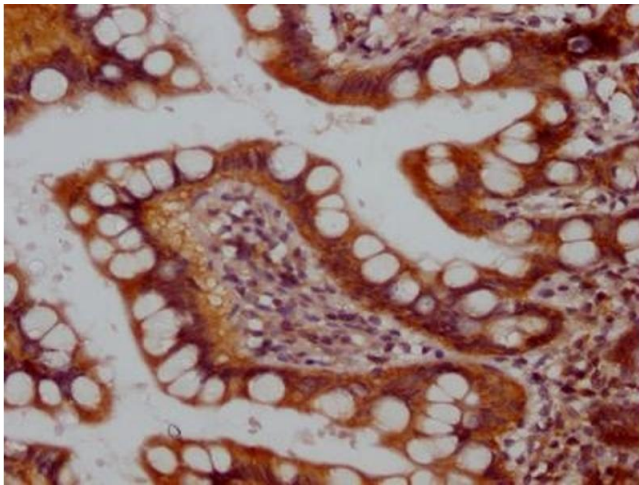
Storage: -20 °C,-80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



Immunohistochemistry

Image 1. IHC image of ABIN7127787 diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.



Immunohistochemistry

Image 2. IHC image of ABIN7127787 diluted at 1:100 and staining in paraffin-embedded human small intestine tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.