


Product datasheet

Anti-Raptor antibody ab125351

1 Image

Overview

Product name	Anti-Raptor antibody
Description	Rabbit polyclonal to Raptor
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Horse, Cow, Dog, Pig, Chimpanzee, Macaque monkey, Gorilla 
Immunogen	Synthetic peptide corresponding to Human Raptor aa 500-600 conjugated to keyhole limpet haemocyanin. (Peptide available as ab155813)
Positive control	This antibody gave a positive signal in the following human whole cell lysates: HepG2; HeLa; HEK293; PANC1; A431.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

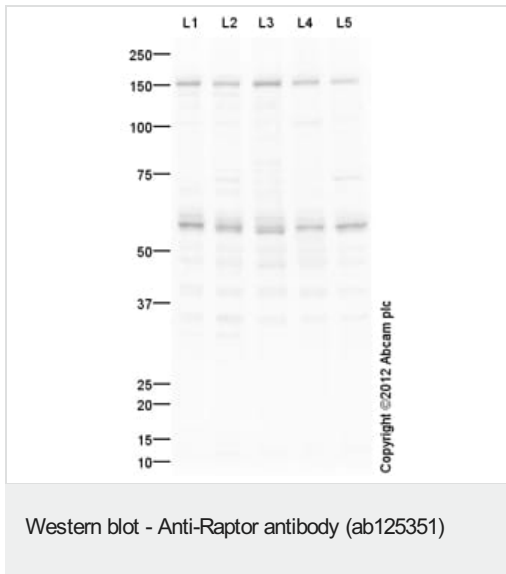
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab125351 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/250. Detects a band of approximately 151 kDa (predicted molecular weight: 149 kDa).

Target

Function	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.
Tissue specificity	Highly expressed in skeletal muscle, and in a lesser extent in brain, lung, small intestine, kidney and placenta.
Sequence similarities	Belongs to the WD repeat RAPTOR family. Contains 7 WD repeats.
Cellular localization	Cytoplasm. Lysosome. Targeting to lysosomes depends on amino acid availability.

Images



All lanes : Anti-Raptor antibody (ab125351) at 1/250 dilution

Lane 1 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 3 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lane 4 : PANC-1 (Human Pancreatic Carcinoma) Whole Cell Lysate

Lane 5 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 149 kDa

Observed band size: 151 kDa

Additional bands at: 60 kDa, 72 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 3 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine

Serum Albumin before being incubated with ab125351 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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