

Product datasheet

Recombinant Human Raptor protein ab112419

[1 References](#) [1 Image](#)

Description

Product name	Recombinant Human Raptor protein
Expression system	Wheat germ
Accession	<u>Q8N122-2</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MESEMLQSPLLGLGEEDEADLTDWNLPLAFMKKRHCEKI EGSKSLAQSWR MKDRMKTVSVALVLCLNVGVDPPDVVKTTPCARLECWID PLSMGPQKALE TIGANLQKQYENWQPRARYQSLDPTVDEVKKLCTSLRR NAKEERVLFHY NGHGVPRPTVNGEVVWFNKNYTQYIPLSYDLQTMGSPS IFVYDCSNAG LVKSFKQFALQREQELEVAAINPNHPLAQMPLPPSMKNCI QLAACEATE LLPMIPDLPADLFTSCLTTPIKIALRWFCMQKCVSLVPGVT LDLIEKIPG RLNDRRTPLGELNWIFTAITDTIAWNVLPRDLFQKLFRODL LVASLFRNF LLAERIMRSYNCTPVSSPRLPPTYMHAMW
Predicted molecular weight	68 kDa including tags
Amino acids	1 to 379

Specifications

Our **Abpromise guarantee** covers the use of **ab112419** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE ELISA Western blot
Form	Liquid

Preparation and Storage

Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

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.

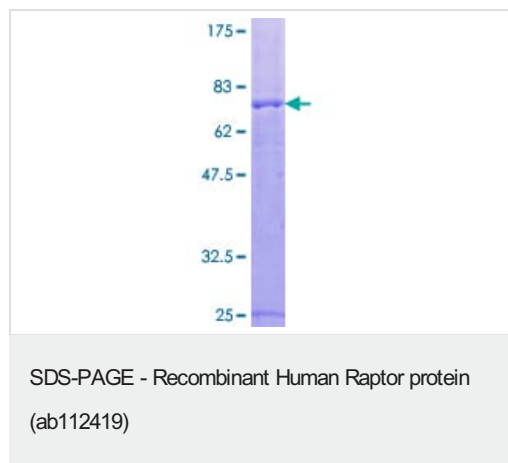
Sequence similarities

Belongs to the WD repeat RAPTOR family.
Contains 7 WD repeats.

Cellular localization

Cytoplasm. Lysosome. Targeting to lysosomes depends on amino acid availability.

Images



ab112419 analysed on a 12.5% SDS-PAGE gel stained with Coomassie Blue.

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