

Datasheet for ABIN3136613

Raptor Protein (AA 1-1335) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Raptor (RPTOR)
Protein Characteristics:	AA 1-1335
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Raptor protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MESEMLQSPL MGLGEEDEAD LTDWNLPALF MKKRHCEKIE GSKSLAQSWR MKDRMKTVSV ALVLCNLNGV DPPDVVKTP CARLECWIDP LSMGPQKALE TIGANLQKQY ENWQPRARYK QSLDPTVDEV KKLCTSLRRN AKEERVLFHY NGHGVPRPTV NGEVWVFNKN YTQYIPLSIY DLQTMWGSPS IFVYDCSNAG LIVKSFQFA LQREQELEVA AINPNHPLAQ MPLPPSMKNC IQLAAACEAHE LLPMIPDLPA DLFTSCLTTP IKIALRWFCM QKCVSLVPGV TLDLIEKIPG RLNDRRTPLG ELNWIFTAIT DTIAWNVLPRL DLFQKLFRQD LLVASLFRNF LLAERIMRSY NCTPVSSPRL PPTYMHAMWQ AWDLAVDICL SQLPTIIEEG TAFRHSPFFA EQLTAFQVWL TMGVENRSPP EQLPIVLQVL LSQVHRLRAL DLLGRFLDLG PWA VSLALSV GIFPYVLKLL QSSARELRPL LVFIWAKILA VDSSCQADLV KDNGHKYFLS VLADPYMPAE HRTMTAFILA VIVNSYTTGQ EACLQGNLIA ICLEQLSDPH PLLRQWVAIC LGRIWQNFDS ARWCGVRDSA HEKLYSLLSD PIPEVRCAAV FALGTFVGNS AERTDHSTTI DHNVAMMLAQ LINDGSPMVR KELVVALSHL VVQYESNFCT VALQFMEEEEK NYPLPSPAAT EGGSLTPVRD SPCTPRLRSV
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SSYGNIRAVT TARNLNKSLQ NLSLTEESGS SVAFSPGNLS TSSASSTLG SPENEEYILS
FETIDKMRRV SSYSALNSLI GVSFNSVYTQ IWRVLLHLAA DPYPDVSDLA MKVLNSIAYK
ATVNARPQRI LDTSSLTQSA PASPTNKGMH MHQVGGSPPA SSTSSCSLTN DVAKQTVSRD
LPSSRPGTAG PTGAQYTPHS HQFPRTRKMF DKGPDQTTDD ADDAAGHKSF ICASMQTGFC
DWSARYFAQA VMKIPPEEHL ESQIRKEREW RFLRNTRVRK QAQQVIQKGI TRLDDQIFLN
RNPGVPSVVK FHPFTPCIAV ADKDSICFWD WEKGEKLDYF HNGNPRYTRV TAMEYLNQGD
CSLLLATDD GAIRVWKNFA DLEKNPEMVT AWQGLSDMLP TTRGAGMVVD WEQETGLLMS
SGDVRIVRIW DTDRETKVQD IPTGADSCVT SLSCDSHRSL IVAGLGDGSI RVYDRRMALS
ECRVMTYREH TAWVVKAYLQ KHPEGHIVSV SVNGDVRFDD PRMPESVNVN QIVKGLTALD
IHPQANLIAC GSMNQFTAIY NGNGELINNI KYDGFMGQR VGAISCLAFH PHWPHLAVGS
NDYYISVYSV EKRVR

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Rptor Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

Product Details

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: Raptor (RPTOR)

Alternative Name: Rptor ([RPTOR Products](#))

Background: 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 (By similarity). {ECO:0000250}.

Molecular Weight: 150.4 kDa Including tag.

UniProt: [Q8K4Q0](#)

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:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process