

Datasheet for ABIN3087166
RIOK2 Protein (AA 1-552) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	RIOK2
Protein Characteristics:	AA 1-552
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RIOK2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MGKVNVAKL R YMSRDDFRVL TAVEMGMKNH EIVPGSLIAS IASLKHGGCN KVLRELVKHK</p> <p>LIAWERTKT V QGYRLTNAGY DYLA LKTLSS RQVVESVGNQ MGVGKESDIY IVANEEGQQF</p> <p>ALKLHRLGR T SFRNLKNKRD YHKHRHNVS W LYLSRLSAMK EFAYMKALYE RKFPVPKPID</p> <p>YNRHAVVMEL INGYPLCQIH HVEDPASVYD EAMELIVKLA NHGLIHGDFN EFNILDES D</p> <p>HITMIDFPQM VSTSHPN AEW YFDRDVKCIK DFFMKRFSYE SELFPTFKDI RREDTLDVEV</p> <p>SASGYTKEMQ ADDELLHPLG PDDKNIETKE GSEFSFSDGE VAEKAEVYGS ENESERNCL E</p> <p>ESEGCYCRSS GDPEQIKEDS LSEESADARS FEMTEFNQAL EEIKGQVVEN NSVTEFSEEK</p> <p>NRTENYNRQD GQRVQGGVPA GSDEYEDECP HLIALLSSLNR EFRPFRDEEN VGAMNQYRTR</p> <p>TL SITSSGSA VSCSTIPPEL VKQKVKRQLT KQKSAVRRR LQKGEANIFT KQRRENMQNI</p> <p>KSSLEAASFW GE</p>

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression

system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade:

custom-made

Target Details

Target:	RIOK2
Alternative Name:	RIOK2 (RIOK2 Products)
Background:	<p>Serine/threonine-protein kinase RIO2 (EC 2.7.11.1) (RIO kinase 2),FUNCTION: Serine/threonine-protein kinase involved in the final steps of cytoplasmic maturation of the 40S ribosomal subunit. Involved in export of the 40S pre-ribosome particles (pre-40S) from the nucleus to the cytoplasm. Its kinase activity is required for the release of NOB1, PNO1 and LTV1 from the late pre-40S and the processing of 18S-E pre-rRNA to the mature 18S rRNA (PubMed:19564402). Regulates the timing of the metaphase-anaphase transition during mitotic progression, and its phosphorylation, most likely by PLK1, regulates this function (PubMed:21880710).</p> <p>{ECO:0000269 PubMed:16037817, ECO:0000269 PubMed:19564402, ECO:0000269 PubMed:21880710}.</p>
Molecular Weight:	63.3 kDa
UniProt:	Q9BVS4

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:	<p>ALICE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
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Handling

Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months