

Datasheet for ABIN3129598 **RIOK3 Protein (AA 1-519) (Strep Tag)**



Overview

Quantity:	250 μg
Target:	RIOK3
Protein Characteristics:	AA 1-519
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RIOK3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MDLVGVSSPE PGPAAAWGPS KCPWATPQNT VSCSLTEVMS EELAKELQLE EEAAAFPEVV
	VAEGPFISGE NIDTSSDLML AQMLQMEFDR EYDAQLRREE KKFNGDSKVS ISFENYRKVH
	PFEDSDSSED EVDWQDTRDD PYRPAKPIPT PKKGFIGKGK DITTKHDEVV CGRKNTARME
	NFAPGFQVGD GIGMDLKLSN HVFNALKQHA YSEERRSARL HEKKEHSTAE KAVDPKTRLL
	MYKMVNSGML ETITGCISTG KESVVFHAYG GSLEDEKEDG KAIPTECAIK VFKTTLNEFK
	NRDKYIKDDF RFKDRFSKLN PRKIIRMWAE KEMHNLTRMQ KAGIPCPTVV LLKKHILVMS
	FIGHDQVPAP KLKEVKLSNE EMKDAYYQTL HLMQQLYNEC TLVHADLSEY NMLWHAGKVW
	LIDVSQSVEP THPHGLEFLF RDCRNVSQFF QKGGVTEALN ERELFNAVSG LNISADNEAD
	FLAEIEALEK MNEDHIQKNG RKAASFLKDD GSPPVLSAD
	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 posttranslational 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:	RIOK3
Alternative Name:	Riok3 (RIOK3 Products)
Background:	Serine/threonine-protein kinase RIO3 (EC 2.7.11.1) (RIO kinase 3),FUNCTION: Involved in regulation of type I interferon (IFN)-dependent immune response which plays a critical role in the innate immune response against DNA and RNA viruses. May act as an adapter protein essential for the recruitment of TBK1 to IRF3. Phosphorylates IFIH1 on 'Ser-828' interfering with IFIH1 filament assembly on long dsRNA and resulting in attenuated IFIH1-signaling. Can inhibit CASP10 isoform 7-mediated activation of the NF-kappaB signaling pathway. May play a role in the biogenesis of the 40S ribosomal subunit. Involved in the processing of 21S pre-rRNA to the mature 18S rRNA. {ECO:0000250 UniProtKB:014730}.
Molecular Weight:	58.7 kDa
UniProt:	Q9DBU3
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:	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!
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.

Handling

	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