

Datasheet for ABIN3136015

Rubicon Protein (AA 1-956) (Strep Tag)



Overview

Quantity:	250 μg
Target:	Rubicon (KIAA0226)
Protein Characteristics:	AA 1-956
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Rubicon protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MRPEGAGMDL GGGDGERLLE KSRREHWQLL GNLKTTVEGL VSANCPNVWS KYGGLERLCR
	DMQNILYHGL IHDQVCCRQA DYWQFVKDIR WLSPHSALHV EKFISLHESD QSDTDSVSER
	AVAELWLQHS LQCHCLSAQL RPLLGDRQYI RKFYTETAFL LSDAHVTAML QCLEAVEQNN
	PRLLAQIDAS MFARKQESPL LVTKSQSLTA LPGSTYTPPA SYAQHSYFGS SSSLQSMPQS
	SHSSERRSTS FSLSGPSWQP QEDRECLSPA ETQTTPAPLP SDSTLAQDSP LTAQEMSDST
	LTSPLEASWV SSQNDSPSDV SEGPEYLAIG NPAPHGRTAS CESHSSNGES SSSHLFSSSS
	SQKLESAASS LGDQEEGRQS QAGSVLRRSS FSEGQTAPVA SGTKKSHIRS HSDTNIASRG
	AAGGPRNITI IVEDPIAEGG QYLCSGEGMF RRPSEGQSLI SYLSEQDFGS CADLEKENAH
	FSISESLIAA IELMKCNMMS QCLEEEEVEE EDSDREIQEL KQKIRLRRQQ IRTKNLLPAY
	RETENGSFRV TSSSSQFSSR DSTQLSESGS AEDADDLEIQ DADIRRSAVS NGKSSFSQNL
	SHCFLHSTSA EAVAMGLLKQ FEGMQLPAAS ELEWLVPEHD APQKLLPIPD SLPISPDDGQ

HADIYKLRIR VRGNLEWAPP RPQIIFNVHP APTRKIAVAK QNYRCAGCGI RTDPDYIKRL
RYCEYLGKYF CQCCHENAQM VVPSRILRKW DFSKYYVSNF SKDLLLKIWN DPLFNVQDIN
SALYRKVKLL NQVRLLRVQL YHMKNMFKTC RLAKELLDSF DVVPGHLTED LHLYSLSDLT
ATKKGELGPR LAELTRAGAA HVERCMLCQA KGFICEFCQN EEDVIFPFEL HKCRTCEECK
ACYHKTCFKS GRCPRCERLQ ARRELLAKQS LESYLSDYEE EPTEALALEA TVLETT

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.

Product Details

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:	Rubicon (KIAA0226)
Alternative Name:	Ruben (KIAA0226 Products)
Background:	Run domain Beclin-1-interacting and cysteine-rich domain-containing protein (Rubicon),FUNCTION: Inhibits PIK3C3 activity, under basal conditions negatively regulates PI3k complex II (PI3KC3-C2) function in autophagy. Negatively regulates endosome maturation and degradative endocytic trafficking and impairs autophagosome maturation process (PubMed:19270693). Can sequester UVRAG from association with a class C Vps complex (possibly the HOPS complex) and negatively regulates Rab7 activation (By similarity). {ECO:0000250 UniProtKB:Q92622, ECO:0000269 PubMed:19270693}., FUNCTION: Involved in regulation of pathogen-specific host defense of activated macrophages. Following bacterial infection promotes NADH oxidase activity by association with CYBA thereby affecting TLR2 signaling and probably other TLR-NOX pathways. Stabilizes the CYBA:CYBB NADPH oxidase heterodimer, increases its association with TLR2 and its phagosome trafficking to induce antimicrobial burst of ROS and production of inflammatory cytokines. Following fungal or viral infection (implicating CLEC7A (dectin-1)-mediated myeloid cell activation or RIGI-dependent sensing of RNA viruses) negatively regulates pro-inflammatory cytokine production by association with CARD9 and sequestering it from signaling complexes (By similarity). {ECO:0000250 UniProtKB:Q92622}.
Molecular Weight:	106.9 kDa
UniProt:	Q80U62
Pathways:	Autophagy
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

Application Details

Expiry Date:

12 months

Application Details		
	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.	
	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.	