Datasheet for ABIN3095234

Rubicon Protein (AA 1-972) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	Rubicon (KIAA0226)
Protein Characteristics:	AA 1-972
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Rubicon protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MRPEGAGMEL GGGEERLPEE SRREHWQLLG NLKTTVEGLV STNSPNVWSK YGGLERLCRD MQSILYHGLI RDQACRRQTD YWQFVKDIRW LSPHSALHVE KFISVHENDQ SSADGASERA VAELWLQHSL QYHCLSAQLR PLLGDRQYIR KFYTDAAFLL SDAHVTAMLQ CLEAVEQNNP RLLAQIDASM FARKHESPLL VTKSQSLTAL PSSTYTPPNS YAQHSYFGSF SSLHQSVPNN GSERRSTSFP LSGPPRKPQE SRGHVSPAED QTIQAPPVSV SALARDSPLT PNEMSSSTLT SPIEASWVSS QNDSPGDASE GPEYLAIGNL DPRGRTASCQ SHSSNAESSS SNLFSSSSSQ KPDSAASSLG DQEGGGESQL SSVLRRSSFS EGQTLTVTSG AKKSHIRSHS DTSIASRGAP ESCNDKAKLR GPLPYSGQSS EVSTPSSLYM EYEGGRYLCS GEGMFRRPSE GQSLISYLSE QDFGSCADLE KENAHFSISE SLIAAIELMK CNMMSQCLEE EEVEEEDSDR EIQELKQKIR LRRQQIRTKN LLPMYQEAEH GSFRVTSSSS QFSSRDSAQL SDSGSADEVD EFEIQDADIR RNTASSSKSF VSSQSFSHCF LHSTSAEAVA MGLLKQFEGM QLPAASELEW LVPEHDAPQK LLPIPDSLPI SPDDGQHADI YKLRIRVRGN LEWAPPRPQI IFNVHPAPTR KIAVAKQNYR

CAGCGIRTDP DYIKRLRYCE YLGKYFCQCC HENAQMAIPS RVLRKWDFSK YYVSNFSKDL LIKIWNDPLF NVQDINSALY RKVKLLNQVR LLRVQLCHMK NMFKTCRLAK ELLDSFDTVP GHLTEDLHLY SLNDLTATRK GELGPRLAEL TRAGATHVER CMLCQAKGFI CEFCQNEDDI IFPFELHKCR TCEECKACYH KACFKSGSCP RCERLQARRE ALARQSLESY LSDYEEEPAE ALALEAAVLE AT

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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 in several dilutions and is measured against its

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	specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	Rubicon (KIAA0226)
Alternative Name:	RUBCN (KIAA0226 Products)
Background:	Run domain Beclin-1-interacting and cysteine-rich domain-containing protein (Rubicon) (Beclin-1 associated RUN domain containing protein) (Baron),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. Can sequester UVRAG from association with a class C Vps complex (possibly the HOPS complex) and negatively regulates Rab7 activation (PubMed:20974968, PubMed:21062745). {ECO:0000269|PubMed:20974968, ECO:0000269|PubMed:21062745}., 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 (PubMed:22423966). 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 (PubMed:22423967). {ECO:0000269|PubMed:22423966, ECO:0000269|PubMed:22423967}.

Target Details

Molecular Weight:	108.6 kDa
UniProt:	Q92622
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 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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)