Datasheet for ABIN3092118

DGKI Protein (AA 1-1065) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	DGKI
Protein Characteristics:	AA 1-1065
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DGKI protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MDAAGRGCHL LPLPAARGPA RAPAAAAAAA ASPPGPCSGA ACAPSAAAGA GAMNPSSSAG EEKGATGGSS SSGSGAGSCC LGAEGGADPR GAGSAAAAGA AALDEPAAAG QKEKDEALEE KLRNLTFRKQ VSYRKAISRA GLQHLAPAHP LSLPVANGPA KEPRATLDWS ENAVNGEHLW LETNVSGDLC YLGEENCQVR FAKSALRRKC AVCKIVVHTA CIEQLEKINF RCKPTFREGG SRSPRENFVR HHWVHRRRQE GKCKQCGKGF QQKFSFHSKE IVAISCSWCK QAFHNKVTCF MLHHIEEPCS LGAHAAVIVP PTWIIKVKKP QNSLKASNRK KKRTSFKRKA SKRGMEQENK GRPFVIKPIS SPLMKPLLVF VNPKSGGNQG TKVLQMFMWY LNPRQVFDLS QEGPKDALEL YRKVPNLRIL ACGGDGTVGW ILSILDELQL SPQPPVGVLP LGTGNDLART LNWGGGYTDE PVSKILCQVE DGTVVQLDRW NLHVERNPDL PPEELEDGVC KLPLNVFNNY FSLGFDAHVT LEFHESREAN PEKFNSRFRN KMFYAGAAFS DFLQRSSRDL SKHVKVVCDG TDLTPKIQEL KFQCIVFLNI PRYCAGTMPW GNPGDHHDFE PQRHDDGYIE VIGFTMASLA ALQVGGHGER

LHQCREVMLL TYKSIPMQVD GEPCRLAPAM IRISLRNQAN MVQKSKRRTS MPLLNDPQSV PDRLRIRVNK ISLQDYEGFH YDKEKLREAS ISDWLRTIAG ELVQSFGAIP LGILVVRGDC DLETCRMYID RLQEDLQSVS SGSQRVHYQD HETSFPRALS AQRLSPRWCF LDDRSQEHLH FVMEISQDEI FILDPDMVVS QPAGTPPGMP DLVVEQASGI SDWWNPALRK RMLSDSGLGM IAPYYEDSDL KDLSHSRVLQ SPVSSEDHAI LQAVIAGDLM KLIESYKNGG SLLIQGPDHC SLLHYAAKTG NGEIVKYILD HGPSELLDMA DSETGETALH KAACQRNRAV CQLLVDAGAS LRKTDSKGKT PQERAQQAGD PDLAAYLESR QNYKVIGHED LETAV

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.

Product Details

	• 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:	DGKI
Alternative Name:	DGKI (DGKI Products)
Background:	Diacylglycerol kinase iota (DAG kinase iota) (DGK-iota) (EC 2.7.1.107),FUNCTION: Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:9830018, PubMed:23949095). Thereby, acts as a central switch between the signaling pathways activated by these second messengers with different cellular targets and opposite effects in numerous biological processes (Probable). Has probably no preference for any of the diacylglycerols in terms of the acyl chain composition, especially for the acyl chain at the sn-2 position (PubMed:9830018). By controlling the diacylglycerol/DAG-mediated activation of RASGRP3, negatively regulates the Rap1 signaling pathway. May play a role in presynaptic diacylglycerol/DAG signaling and control neurotransmitter release during metabotropic glutamate receptor-dependent long-term depression (By similarity). {ECO:0000250|UniProtKB:D3YWQ0, ECO:0000269|PubMed:23949095, ECO:0000269|PubMed:9830018, ECO:0000305}.
Molecular Weight:	117.0 kDa
UniProt:	O75912

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

Application Details

	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.
Expiry Date:	12 months