

Datasheet for ABIN3092083

**DGKH Protein (AA 1-1220) (Strep Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	DGKH
Protein Characteristics:	AA 1-1220
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DGKH protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

## Product Details

Sequence:	MAGAGGQHHP PGAAGGAAAG AGAAVTSAAA SAGPGEDSSD SEAEQEGPQK LIRKVSTSGQ IRTKTSIKEG QLLKQTSSFQ RWKKRYFKLR GRTLYYAKDS KSLIFDEVDL SDASVAEAST KNANNSFTII TPFRRMLCA ENRKEMEDWI SSLKSVQTRE PYEVAQFNVE HFSGMHNWYA CSHARPTFCN VCRESLSGVT SHGLSCEVCK FKAHKRCAVR ATNNCKWTTL ASIGKDIID EDGVAMPHQW LEGNLPVSAK CAVCDKTCGS VLRLQDWKCL WCKTMVHTAC KDLYHPICPL GQCKVSIIPP IALNSTSDSG FCRATFSFCV SPLLVFVNSK SGDNGQVKFL RRFKQLLNPA QVFDLMNGGP HLGLRLFQKF DNFRILVCGG DGSVGWVLSE IDKLNLNKQC QLGVLPLGTG NDLARVLGWG GSYDDDTQLP QILEKLERAS TKMLDRWSIM TYELKLPPKA SLLPGPPEAS EEFYMTIYED SVATHLTKIL NSDEHAVVIS SAKTLCETVK DFMVAKVEKTY DKTLENVAVVA DAVASKCSVL NEKLEQLLQA LHTDSQAAPV LPGLSPLIVE EDAVESSEE SLGESKEQLG DDVTKPSSQK AVKPREIMLR ANSLKKAVRQ VIEEAGKVMD DPTVHPCEPA NQSSDYDSTE TDESKEEAKD DGAKESITVK TAPRSPDARA SYGHSQTDSV PGPAVAASKE NLPVLNTRII
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CPGLRAGLAA SIAGSSIINK MLLANIDPFG ATPFIDPDL SVDGYSEKCV MNMYFGIGLD  
AKISLEFNK REEHPEKCRS RTKNLMWYGV LGTRELLQRS YKNLEQVRQL ECDGQYIPLP  
SLQGI AVLNI PSYAGGTNFW GGTKEDDIFA APSFDDKILE VVAIFDSMQM AVSRVILQKH  
HRIAQCRTVK ITIFGDEGVP VQVDGEAWVQ PPGIIVHK NRAQMLTRDR AFESTLKSWE  
DKQKCDSGKP VLRTHLYIHH AIDLATEEVS QMQLCSQAAE ELITRICDAA TIHCLLEQEL  
AHAVNACSHA LNKANPRCPE SLTRDTATEI AINVKALYNE TESLLVGRVP LQLESPHEER  
VSNALHSVEV ELQKLTEIPW LYYILHPNED EEPMDCTKR NNRSTVFRIV PKFKKEKVQK  
QKTSSQPVQK WGTEEVAWL DLLNLGEYKD IFIRHDIRGA ELLHLERRDL KDLGIPKVGH  
VKRILQGIKE LGRSTPQSEV

**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.**

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### 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!

Product Details

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 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)
Grade:	Crystallography grade

Target Details

Target:	DGKH
Alternative Name:	DGKH ( <a href="#">DGKH Products</a> )
Background:	Diacylglycerol kinase eta (DAG kinase eta) (EC 2.7.1.107) (Diglyceride kinase eta) (DGK-eta),FUNCTION: Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:12810723, 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) (PubMed:12810723, PubMed:23949095). Plays a key role in promoting cell growth (PubMed:19710016). Activates the Ras/B-Raf/C-Raf/MEK/ERK signaling pathway induced by EGF (PubMed:19710016). Regulates the recruitment of RAF1 and BRAF from cytoplasm to membranes and their heterodimerization (PubMed:19710016). {ECO:0000269 PubMed:12810723, ECO:0000269 PubMed:19710016, ECO:0000269 PubMed:23949095, ECO:0000305}.
Molecular Weight:	134.9 kDa

## Target Details

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UniProt: [Q86XP1](#)

## Application Details

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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

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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)



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process