



[Go to Product page](#)

Datasheet for ABIN3078766

DGKG Protein (AA 1-791) (Strep Tag)

1 Image

Overview

Quantity:	1 mg
Target:	DGKG
Protein Characteristics:	AA 1-791
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DGKG protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Sequence: MGEERWVSLT PEEFDQLQKY SEYSSKKIKD ALTEFNEGGS LKQYDPHEPI SYDVFKLFMR
AYLEVDLPQP LSTHLFLAFS QKPRHETSDH PTEGASNSEA NSADTNIQNA DNATKADEAC
APDTESMAE KQAPAEQVA ATPLEPPVPR SSSSESPVVY LKDVV CYLSL LETGRPQDKL
EFMFRLYDSD ENGLLDQAEM DCIVNQMLHI AQYLEWDPTL LRPILKEMLQ GMDYDRDGFV
SLQEWVHGGM TTIPLLVLLG MDDSGSKGDG RHAWTMKHFH KPTYCNFCHI MLMGVRKQGL
CCTYCKYTVH ERVSRNIPG CVKTYSKAKR SGEVMQHAWV EGNSSVKCDR CHKSIKCYQS
VTARHCVWCR MTFHRKCELS TLCDGGELRD HILLPTSICP ITRDRPGEKS DGCVSAKGEL
VMQYKIIPTP GTHPLLVLVN PKSGGRQGER ILRKFHYLLN PKQVFNLDNG GPTPGLNFFR
DTPDFRVLAC GGDGTVGWIL DCIDKANFAK HPPVAVLPLG TGNDLARCLR WGGGYEGGSL
TKILKDIEQS PLVMLDRWHL EVIPREEVEN GDQVPYSIMN NYFSIGVDAS IAHRFHVMRE
KHPEKFNSRM KNKLWYFEFG TSETFAATCK KLHDHIELEC DGVGVDSLNI FLEGIAILNI
PSMYGGTNLW GENKKNRAVI RESRKGVTDP KELKFCVQDL SDQLLEVVGL EGAMEMGQIY

TGLKSAGRRL AQCASVTIRT NKLLPMQVDG EPWMQPCCTI KITHKNQAPM MMGPPQKSSF
FSLRRKSRSK D

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 specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALICE®): <ol style="list-style-type: none">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:	DGKG
Alternative Name:	DGKG (DGKG Products)
Background:	<p>Diacylglycerol kinase gamma (DAG kinase gamma) (EC 2.7.1.107) (Diglyceride kinase gamma) (DGK-gamma),FUNCTION: Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:8034597). 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 (By similarity). Has no apparent specificity with regard to the acyl compositions of diacylglycerol (PubMed:8034597). Specifically expressed in the cerebellum where it controls the level of diacylglycerol which in turn regulates the activity of protein kinase C gamma. Through protein kinase C gamma, indirectly regulates the dendritic development of Purkinje cells, cerebellar long term depression and ultimately cerebellar motor coordination (By similarity). {ECO:0000250 UniProtKB:Q91WG7, ECO:0000269 PubMed:8034597}.</p>
Molecular Weight:	89.1 kDa
UniProt:	P49619

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.
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Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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)

Images



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