

Datasheet for ABIN3078766

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



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### Overview

Quantity:	250 µg
Target:	DGKG
Protein Characteristics:	AA 1-791
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DGKG protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MGEERWVSLT PEEFDQLQKY SEYSSKKIKD ALTEFNEGGS LKQYDPHEPI SYDVFKLFMR</p> <p>AYLEVDLPQP LSTHLFLAFS QKPRHETSDH PTEGASNSEA NSADTNIQNA DNATKADEAC</p> <p>APDTESNMAE KQAPAEQVA ATPLEPPVPR SSSSESPVVY LKDVVCYLSL LETGRPQDKL</p> <p>EFMFRLYDSD ENGLLDQAEM DCIVNQMLHI AQYLEWDPTE LRPILKEMLQ GMDYDRDGFV</p> <p>SLQEWVHGGM TTIPLLVLG MDDSGSKGDG RHAWTMKHFK KPTYCNFCHI MLMGVRKQGL</p> <p>CCTYCKYTVH ERCVSRNIPG CVKTYSKAKR SGEVMQHAWV EGNSSVKCDR CHKSIKCYQS</p> <p>VTARHCVWCR MTFHRKCELS TLCDGGELRD HILLPTSICP ITRDRPGEKS DGCVSAKDEL</p> <p>VMQYKIPTP GTHPLLVLVN PKSGGRQGER ILRKPHYLLN PKQVFNLDNG GPTPGLNFFR</p> <p>DTPDFRVLAC GGDGTGVWIL DCIDKANFAK HPPVAVLPLG TGNDLARCLR WGGGYEGGSL</p> <p>TKILKDIEQS PLVMLDRWHL EVIPREEVEN GDQVPYSIMN NYFSIGVDAS IAHRFHVMRE</p> <p>KHPEKFNSRM KNKLWYFEFG TSETFAATCK KLHDHIELEC DGVGVDSLNI FLEGIAILNI</p>

PSMYGGTNLW GENKKNRAVI RESRKGVTDP KELKFCVQDL SDQLLEVVG L 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 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.
- 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

## Product Details

	System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

## Target Details

Target:	DGKG
Alternative Name:	DGKG ( <a href="#">DGKG Products</a> )
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:	<a href="#">P49619</a>

## 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:	<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</p>

Application Details

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