Datasheet for ABIN3092084

DGKQ Protein (AA 1-942) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	DGKQ
Protein Characteristics:	AA 1-942
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DGKQ protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MAAAAEPGAR AWLGGGSPRP GSPACSPVLG SGGRARPGPG PGPGPERAGV RAPGPAAAPG HSFRKVTLTK PTFCHLCSDF IWGLAGFLCD VCNFMSHEKC LKHVRIPCTS VAPSLVRVPV AHCFGPRGLH KRKFCAVCRK VLEAPALHCE VCELHLHPDC VPFACSDCRQ CHQDGHQDHD THHHHWREGN LPSGARCEVC RKTCGSSDVL AGVRCEWCGV QAHSLCSAAL APECGFGRLR SLVLPPACVR LLPGGFSKTQ SFRIVEAAEP GEGGDGADGS AAVGPGRETQ ATPESGKQTL KIFDGDDAVR RSQFRLVTVS RLAGAEEVLE AALRAHHIPE DPGHLELCRL PPSSQACDAW AGGKAGSAVI SEEGRSPGSG EATPEAWVIR ALPRAQEVLK IYPGWLKVGV AYVSVRVTPK STARSVVLEV LPLLGRQAES PESFQLVEVA MGCRHVQRTM LMDEQPLLDR LQDIRQMSVR QVSQTRFYVA ESRDVAPHVS LFVGGLPPGL SPEEYSSLLH EAGATKATVV SVSHIYSSQG AVVLDVACFA EAERLYMLLK DMAVRGRLLT ALVLPDLLHA KLPPDSCPLL VFVNPKSGGL KGRDLLCSFR KLLNPHQVFD LTNGGPLPGL HLFSQVPCFR VLVCGGDGTV GWVLGALEET

RYRLACPEPS VAILPLGTGN DLGRVLRWGA GYSGEDPFSV LLSVDEADAV LMDRWTILLD AHEAGSAEND TADAEPPKIV QMSNYCGIGI DAELSLDFHQ AREEEPGKFT SRLHNKGVYV RVGLQKISHS RSLHKQIRLQ VERQEVELPS IEGLIFINIP SWGSGADLWG SDSDTRFEKP RMDDGLLEVV GVTGVVHMGQ VQGGLRSGIR IAQGSYFRVT LLKATPVQVD GEPWVQAPGH MIISAAGPKV HMLRKAKQKP RRAGTTRDAR ADAAPAPESD PR

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.

Product Details

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:	DGKQ
Alternative Name:	DGKQ (DGKQ Products)
Background:	Diacylglycerol kinase theta (DAG kinase theta) (DGKtheta) (EC 2.7.1.107) (EC 2.7.1.93) (Diglyceride kinase theta) (DGK-theta),FUNCTION: Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:9099683, PubMed:11309392, PubMed:22627129). 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 (PubMed:11309392, PubMed:17664281, PubMed:26748701). Within the adrenocorticotropic hormone signaling pathway, produces phosphatidic acid which in turn activates NR5A1 and subsequent steroidogenic gene transcription (PubMed:17664281). Also functions downstream of the nerve growth factor signaling pathway being specifically activated in the nucleus by the growth factor (By similarity). Through its diacylglycerol activity also regulates synaptic vesicle endocytosis (PubMed:26748701). {ECO:0000250|UniProtKB:D3ZEY4, ECO:0000269|PubMed:11309392, ECO:0000269|PubMed:17664281, ECO:0000269|PubMed:22627129, ECO:0000269|PubMed:26748701, ECO:0000269|PubMed:9099683}.
Molecular Weight:	101.2 kDa
UniProt:	P52824

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