

Datasheet for ABIN3092757

GGA3 Protein (AA 1-723) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	GGA3
Protein Characteristics:	AA 1-723
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GGA3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MAEAEGESLE SWLNKATNPS NRQEDWEYII GFCDQINKEL EGPQIAVRLL AHKIQSPQEW EALQALT VLE ACMKNCGRRF HNEVGKFRFL NELIKVVSPK YLGDRVSEKV KTKVIELLYS WTMALPEEAK IKDAYHMLKR QGIVQSDPPI PVDRTLIPSP PPRPKNPVFD DEEKSLLAK LLKSKNPDDL QEANKLIKSM VKEDEARIQK VTKRLHTLEE VNNNVRLLE MLLHYSQEDS SDGDRELMKE LFDQCENKRR TLFKLASETE DNDNSLGDIL QASDNLSRVI NSYKTIIEGQ VINGEVATLT LPDSEGNSQC SNQGTLDILA ELDTTNSLSS VLAPAPTPPS SGIPILPPPP QASGPPRSRS SSQAEATLGP SSTSNALSWL DEELLCLGLA DPAPNVPPKE SAGNSQWHLL QREQSDLDF SPRPGTAACG ASDAPLLQPS APSSSSSQAP LPPFPAPVV PASVPAPSAG SSLFSTGVAP ALAPKVEPAV PGHHGLALGN SALHHLDALD QLLEEAQVTS GLVKPTTSPL IPTTTTPARPL LPFSTGPGSP LFQPLSFQSQ GSPPKGPELS LASIHVPLES IKPSSALPVT AYDKNGFRIL FHFAKECPPG RPDVLVVVVS MLNTAPLPVK SIVLQAAVPK SMKVKLQPPS</p>

GTELSPFSPI QPPAAITQVM LLANPLKEKV RLRYKLTFAL GEQLSTEVGE VDQFPPVEQW GNL

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 System (ALiCE®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: GGA3

Alternative Name: GGA3 ([GGA3 Products](#))

Background: ADP-ribosylation factor-binding protein GGA3 (Golgi-localized, gamma ear-containing, ARF-binding protein 3),FUNCTION: Plays a role in protein sorting and trafficking between the trans-Golgi network (TGN) and endosomes. Mediates the ARF-dependent recruitment of clathrin to the TGN and binds ubiquitinated proteins and membrane cargo molecules with a cytosolic acidic cluster-dileucine (DXXLL) motif (PubMed:11301005). Mediates export of the GPCR receptor ADRA2B to the cell surface (PubMed:26811329). Involved in BACE1 transport and sorting as well as regulation of BACE1 protein levels (PubMed:17553422, PubMed:15615712, PubMed:20484053). Regulates retrograde transport of BACE1 from endosomes to the trans-Golgi network via interaction through the VHS motif and dependent of BACE1 phosphorylation (PubMed:15615712). Modulates BACE1 protein levels independently of the interaction between VHS domain and DXXLL motif through recognition of ubiquitination (PubMed:20484053). Key player in a novel DXXLL-mediated endosomal sorting machinery to the recycling pathway that targets NTRK1 to the plasma membrane (By similarity).
{ECO:0000250|UniProtKB:A0A0G2JV04, ECO:0000269|PubMed:11301005, ECO:0000269|PubMed:15615712, ECO:0000269|PubMed:17553422, ECO:0000269|PubMed:20484053, ECO:0000269|PubMed:26811329}.

Molecular Weight: 78.3 kDa

UniProt: [Q9NZ52](#)

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 *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.

Application Details

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