

Datasheet for ABIN3080754  
**GGA1 Protein (AA 1-639) (Strep Tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	GGA1
Protein Characteristics:	AA 1-639
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GGA1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence: MEPAMEPETL EARINRATNP LNKELDWASI NGFCEQLNED FEGPPLATRL LAHKIQSPQE  
WEAIQALTVL ETCMKSCGKR FHDEVGKFRF LNELIKVVSP KYLGSRITSEK VKNKILELLY  
SWTVGLPEEV KIAEAYQMLK KQGIVKSDPK LPDDTTFFPLP PPRPKNVIFE DEEKSMLAR  
LLKSSHPEDL RAANKLIKEM VQEDQKRMEK ISKRVNAIEE VNNNVKLLTE MVMHSQGGGA  
AAGSSEDLMK ELYQRCERMR PTLFRLASDT EDNDEALAEI LQANDNLTQV INLYKQLVRG  
EEVNGDATAG SIPGSTSALL DLSGLDLPPA GTTYPAMPTR PGEQASPEQP SASVSLLDDE  
LMSLGLSDPT PPSGPSLDGT GWNSFQSSDA TEPPAPALAQ APSMESRPPA QTSLPASSGL  
DDL DLLGKTL LQQSLPPESQ QVRWEKQQPT PRLTLRDLQN KSSSCSSPSS SATSLLHTVS  
PEPPRPQQP VPTELASLAI TVPLESIKPS NILPVTVYDQ HGFRILFHFA RDPLPGRSDV  
LVVVVSMMLST APQPIRNIVF QSAVPKVMKV KLQPPSGTEL PAFNPVHPS AITQVLLLAN  
PQKEKVRLRY KLTFTMGDQT YNEMGDVDQF PPPETWGSL

**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!

#### 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

## Product Details

- 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:	GGA1
Alternative Name:	GGA1 ( <a href="#">GGA1 Products</a> )
Background:	ADP-ribosylation factor-binding protein GGA1 (Gamma-adaptin-related protein 1) (Golgi-localized, gamma ear-containing, ARF-binding protein 1),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, PubMed:15886016). Mediates export of the GPCR receptor ADRA2B to the cell surface (PubMed:27901063). Required for targeting PKD1:PKD2 complex from the trans-Golgi network to the cilium membrane (By similarity). Regulates retrograde transport of proteins such as phosphorylated form of BACE1 from endosomes to the trans-Golgi network (PubMed:15886016, PubMed:15615712). {ECO:0000250 UniProtKB:Q8R0H9, ECO:0000269 PubMed:11301005, ECO:0000269 PubMed:15615712, ECO:0000269 PubMed:15886016, ECO:0000269 PubMed:27901063}.
Molecular Weight:	70.4 kDa
UniProt:	<a href="#">Q9UJY5</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:	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

## Application Details

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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