

Datasheet for ABIN3092723

**AGL Protein (AA 1-1532) (Strep Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	AGL
Protein Characteristics:	AA 1-1532
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AGL protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

## Product Details

Sequence:	MGHSKQIRIL LLNEMEKLEK TLFRLQGYE LQFRLGPTLQ GKAVTVYTNY PFPGETFNRE KFRSLDWENP TEREDDSKY CKLNLQSGS FQYYFLQGNE KSGGGYIVVD PILRVGADNH VLPLDCVTLQ TFLAKCLGPF DEWESRLRVA KESGYNMIHF TPLQTLGLSR SCYSLANQLE LNPDFS RPNR KYTWNDVGQL VEKLKKEWNV ICITDVVYNH TAANSKWIQE HPECAYNLVN SPHLKPAWVL DRALWRFSCD VAEGKYKEKG IPALIENDHH MNSIRKIIWE DIFPKLKLWE FFQVDVNKAV EQFRLLTQE NRRVTKSDPN QHLTIIQDPE YRRFGCTVDM NIALTTFIPH DKGPAAIEEC CNWFHKRMEE LNSEKHLIN YHQQAVNCL LGNVFYERLA GHGPKLGPVT RKHPLVTRYF TFPFEEIDFS MEESMIHLPN KACFLMAHNG WVMGDDPLRN FAEPGSEVYL RRELICWGDS VKLRYGNKPE DCPYLWAHMK KYTEITATYF QGVRLDNCHS TPLHVAEYML DAARNLQPNL YVVAELFTGS EDLDNVFVTR LGISSLIREA MSAYNSHEEG RLVYRYGGEP VGSEFVQCLR PLMPAIAHAL FMDITHDNEC PIVHRSAYDA LPSTTIVSMA CCASGSTRGY DELVPHQISV VSEERFYTKW NPEALPSNTG EVNFQSGIIA ARCAISKLHQ ELGAKGFIQV
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YVDQVDEDIV AVTRHSPSIH QSVVAVSRTA FRNPKTSFYS KEVPQMCIPG KIEEVVLEAR  
TIERNTKPYR KDENSINGTP DITVEIREHI QLNESKIVKQ AGVATKGPNE YIQEIEFENL SPGSVIFRV  
SLDPHAQVAV GILRNHLTQF SPHFKSGSLA VDNADPILKI PFASLASRLT LAELNQILYR  
CESEEEKEDGG GCYDIPNWSA LKYAGLQGLM SVLAEIRPKN DLGHPFCNNL RSGDWMIDYV  
SNRLISRSGT IAEVGKWLQA MFFYLKQIPR YLIPCYFDAI LIGAYTTLLD TAWKQMSSFV  
QNGSTFVKHL SLGSVQLCGV GKFPSPILS PALMDVPYRL NEITKEKEQC CVSLAAGLPH  
FSSGIFRCWG RDTFIALRGI LLITGRYVEA RNIILAFAGT LRHGLIPNLL GEGIYARYNC  
RDAVWWWLQC IQDYCKMVPN GLDILKCPVS RMYPTDDSAP LPAGTLDQPL FEVIQEQAMQK  
HMQGIQFRER NAGPQIDRNM KDEGFNITAG VDEETGFVYG GNRFCNGTWM DKMGESDRAR  
NRGIPATPRD GSAVEIVGLS KSAVRWLELL SKKNIFPYHE VTVKRHGKAI KVSYDEWNRK  
IQDNFEKLFH VSEDPSDLNE KHPNLVHKRG IYKDSYGASS PWCDYQLRPN FTIAMVVAPE  
LFTTEKAWKA LEIAEKLLG PLGMKTLDPD DMVYCGIYDN ALDNDNYNLA KGFNYHQGPE  
WLWPIGYFLR AKLYFSRLMG PETTAKTIVL VKNVLSRHYV HLERSPWKGL PELTNENAYQ  
CPFSCETQAW SIATILETLY DL

**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.

## Product 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!

### 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 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:	AGL
Alternative Name:	AGL ( <a href="#">AGL Products</a> )
Background:	Glycogen debranching enzyme (Glycogen debrancher) [Includes: 4-alpha-glucanotransferase (EC 2.4.1.25) (Oligo-1,4-1,4-glucantransferase), Amylo-alpha-1,6-glucosidase (Amylo-1,6-glucosidase) (EC 3.2.1.33) (Dextrin 6-alpha-D-glucosidase)],FUNCTION: Multifunctional enzyme acting as 1,4-alpha-D-glucan:1,4-alpha-D-glucan 4-alpha-D-glycosyltransferase and amylo-1,6-glucosidase in glycogen degradation.
Molecular Weight:	174.8 kDa
UniProt:	<a href="#">P35573</a>

## Target Details

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Pathways: [Cellular Glucan Metabolic Process](#)

## Application Details

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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.

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

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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)



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