

# Datasheet for ABIN3092483 **EYA4 Protein (AA 1-639) (Strep Tag)**



### Overview

Quantity:	250 μg
Target:	EYA4
Protein Characteristics:	AA 1-639
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EYA4 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MEDSQDLNEQ SVKKTCTESD VSQSQNSRSM EMQDLASPHT LVGGGDTPGS SKLEKSNLSS
	TSVTTNGTGG ENMTVLNTAD WLLSCNTPSS ATMSLLAVKT EPLNSSETTA TTGDGALDTF
	TGSVITSSGY SPRSAHQYSP QLYPSKPYPH ILSTPAAQTM SAYAGQTQYS GMQQPAVYTA
	YSQTGQPYSL PTYDLGVMLP AIKTESGLSQ TQSPLQSGCL SYSPGFSTPQ PGQTPYSYQM
	PGSSFAPSST IYANNSVSNS TNFSGSQQDY PSYTAFGQNQ YAQYYSASTY GAYMTSNNTA
	DGTPSSTSTY QLQESLPGLT NQPGEFDTMQ SPSTPIKDLD ERTCRSSGSK SRGRGRKNNP
	SPPPDSDLER VFVWDLDETI IVFHSLLTGS YAQKYGKDPP MAVTLGLRME EMIFNLADTH
	LFFNDLEECD QVHIDDVSSD DNGQDLSTYS FATDGFHAAA SSANLCLPTG VRGGVDWMRK
	LAFRYRRVKE LYNTYKNNVG GLLGPAKRDA WLQLRAEIEG LTDSWLTNAL KSLSIISTRS
	NCINVLVTTT QLIPALAKVL LYSLGGAFPI ENIYSATKIG KESCFERIMQ RFGRKVVYVV
	IGDGVEEEQA AKKHNMPFWR ISSHSDLLAL HQALELEYL

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

## **Product Details** Grade: custom-made **Target Details** Target: EYA4 Alternative Name EYA4 (EYA4 Products) Background: Eyes absent homolog 4 (EC 3.1.3.48), FUNCTION: Tyrosine phosphatase that specifically dephosphorylates 'Tyr-142' of histone H2AX (H2AXY142ph). 'Tyr-142' phosphorylation of histone H2AX plays a central role in DNA repair and acts as a mark that distinguishes between apoptotic and repair responses to genotoxic stress. Promotes efficient DNA repair by dephosphorylating H2AX, promoting the recruitment of DNA repair complexes containing MDC1. Its function as histone phosphatase probably explains its role in transcription regulation during organogenesis. May be involved in development of the eye (By similarity). {ECO:0000250|UniProtKB:Q99502}. Molecular Weight: 69.5 kDa UniProt: 095677 Pathways: Sensory Perception of Sound **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. 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

For Research Use only

Restrictions:

needed is the DNA that codes for the desired protein!

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

## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.  Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months