

Datasheet for ABIN3134715

EYA3 Protein (AA 1-510) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	EYA3
Protein Characteristics:	AA 1-510
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EYA3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MQEPREQTLS QVNNPDASDE KPETSSLASN LSMSEEIMTC TDYIPRSSND YTSQMYSAKP YAHILSVPVS ETTYPGQTQY QTLQQSQPYA VYPQATQTYG LPPFASSTNA SLIPTSSAIA NIPAAVASI SNQDYPTYTI LGQNQYQACY PSSSFGVTGQ TNSDAETTTL AATTYQTEKP SAMVPAPATQ RLPDSSASP PLSQTTPNKG ADDQARKNMT VKNRGKRKAD ASSSQDSELE RVFLWDLDET IIIFHSLLTG SYAQKYGKDP TVVIGSGLTM EEMIFEVADT HLFNDLEEC DQVHVEDVAS DDNGQDLSNY SFSTDGFSGS GSGSGHSSV GVQGGVDWMR KLAFRYRKVR EIYDKHKSNV GLLSPQRKE ALQRLRAEIE VLTDSWLGT A LKSLLIQSR KNCANVLITT TQLVPALAKV LLYGLGEIFP IENIYSATKI GKESCFERIV SRFGKKVTYV VIGDGRDEEI AAKQHNMPFW RITNHGDLVS LHQAELDFL</p> <p>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</p>

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®).

Purity:

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

Grade:

custom-made

Target Details

Target:	EYA3
Alternative Name:	Eya3 (EYA3 Products)
Background:	Eyes absent homolog 3 (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 (By similarity). Its function as histone phosphatase probably explains its role in transcription regulation during organogenesis. The phosphatase activity has been shown in vitro. Coactivates SIX1. Seems to coactivate SIX2, SIX4 and SIX5. The repression of precursor cell proliferation in myoblasts by SIX1 is switched to activation through recruitment of EYA3 to the SIX1-DACH1 complex and seems to be dependent on EYA3 phosphatase activity. May be involved in development of the eye. May play a role in mediating the induction and differentiation of cranial placodes. {ECO:0000250 UniProtKB:Q99504, ECO:0000269 PubMed:10490620}.
Molecular Weight:	56.0 kDa
UniProt:	P97480
Pathways:	Positive Regulation of Response to DNA Damage Stimulus

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:	<p>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 even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>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!</p>

Application Details

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