

Datasheet for ABIN3092435

EYA1 Protein (AA 1-592) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	EYA1
Protein Characteristics:	AA 1-592
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EYA1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MEMQDLTSPH SRLSGSSESP SGPKLGNSHI NSNSMTPNGT EVKTEPMSSS ETASTTADGS</p> <p>LNNFSGSAIG SSSFSRPTH QFSPQIYPS NRPYPHILPT PSSQTMAAYG QTQFTTGMMQ</p> <p>ATAYATYPQP GQPYGISSYG ALWAGIKTEG GLSQSQSPGQ TGFLSYGTSF STPQPGQAPY</p> <p>SYQMQGSSFT TSSGIYTGNN SLTNSSGFNS SQQDYPSYPS FGQGQYQY YNSSPYPAHYM</p> <p>TSSNTSPTTP STNATYQLQE PPSGITSQAV TDPTAEYSTI HSPSTPIKDS DSDRLRRGSD</p> <p>GKSRGRGRRN NNPSPPDSD LERVFIWDLT ETIIVFHSLL TGSYANRYGR DPPTSVSLGL</p> <p>RMEEMIFNLA DTHLFFNDLE ECDQVHIDV SSDDNGQDLS TYNFGTDGFP AAATSANLCL</p> <p>ATGVRGGVDW MRKLAFRYRR VKEIYNTYKN NVGGLLGPAP REAWLQLRAE IEALTDSWLT</p> <p>LALKALSLIH SRTNCVNILV TTTQLIPALA KVLVLYGLGIV FPIENIYSAT KIGKESCFER IIQRFGRKVV</p> <p>YVVGIDGVVEE EQGAKKHAMP FWRISHSDDL MALHHALELE YL</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 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:	EYA1
Alternative Name:	EYA1 (EYA1 Products)
Background:	Eyes absent homolog 1 (EC 3.1.3.16) (EC 3.1.3.48),FUNCTION: Functions both as protein phosphatase and as transcriptional coactivator for SIX1, and probably also for SIX2, SIX4 and SIX5 (By similarity). Tyrosine phosphatase that dephosphorylates 'Tyr-142' of histone H2AX (H2AXY142ph) and promotes efficient DNA repair via the recruitment of DNA repair complexes containing MDC1. '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 (PubMed:19234442). Its function as histone phosphatase may contribute to its function in transcription regulation during organogenesis (By similarity). Has also phosphatase activity with proteins phosphorylated on Ser and Thr residues (in vitro) (By similarity). Required for normal embryonic development of the craniofacial and trunk skeleton, kidneys and ears (By similarity). Together with SIX1, it plays an important role in hypaxial muscle development, in this it is functionally redundant with EYA2 (By similarity). {ECO:0000250 UniProtKB:P97767, ECO:0000269 PubMed:19234442}.
Molecular Weight:	64.6 kDa
UniProt:	Q99502
Pathways:	Sensory Perception of Sound, 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