



Datasheet for ABIN3093731

MEF2A Protein (AA 1-507) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	MEF2A
Protein Characteristics:	AA 1-507
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MEF2A protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Sequence: MGRKKIQITR IMDERNRQVT FTKRKFGMLK KAYELSVLCD CEIALIFNS SNKLFQYAST
DMDKVLLKYT EYNEPHESRT NSDIVEALNK KEHRGCDSPD PDTSYVLTPH TEEKYKKINE
EFDNMMRNHK IAPGLPPQNF SMSVTVPVTS PNALSYTNPG SSLVSPSLAA SSTLTDSSML
SPPQTTLHRN VSPGAPQRPP STGNAGGMLS TTDLTVPNGA GSSPVGNGFV NSRASPNLIG
ATGANS LGKV MPTKSPPPPG GGNLGMNSRK PDLRVVIPPS SKGMMPPPLSE EEELELNTQR
ISSSQATQPL ATPVVSVTTP SLPPQGLVYS AMPTAYNTDY SLTSADLSAL QGFNSPGMLS
LGQVSAWQQH HLGQAALSSL VAGGQLSQGS NLSINTNQNI SIKSEPI SPP RDRMTPSGFQ
QQQQQQQQQQ PPPPPQPQPQ PPQPQPRQEM GRSPVDSLSS SSSSYDGS DR EDPRGDFHSP
IVLGRPPNTE DRESPSVKRM RMDAWVT

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 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 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

Product Details

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:	MEF2A
Alternative Name:	MEF2A (MEF2A Products)
Background:	<p>Myocyte-specific enhancer factor 2A (Serum response factor-like protein 1),FUNCTION: Transcriptional activator which binds specifically to the MEF2 element, 5'-YTA[AT](4)TAR-3', found in numerous muscle-specific genes. Also involved in the activation of numerous growth factor- and stress-induced genes. Mediates cellular functions not only in skeletal and cardiac muscle development, but also in neuronal differentiation and survival. Plays diverse roles in the control of cell growth, survival and apoptosis via p38 MAPK signaling in muscle-specific and/or growth factor-related transcription. In cerebellar granule neurons, phosphorylated and sumoylated MEF2A represses transcription of NUR77 promoting synaptic differentiation. Associates with chromatin to the ZNF16 promoter. {ECO:0000269 PubMed:11904443, ECO:0000269 PubMed:12691662, ECO:0000269 PubMed:15834131, ECO:0000269 PubMed:16371476, ECO:0000269 PubMed:16484498, ECO:0000269 PubMed:16563226, ECO:0000269 PubMed:21468593, ECO:0000269 PubMed:9858528}.</p>
Molecular Weight:	54.8 kDa
UniProt:	Q02078
Pathways:	Neurotrophin Signaling Pathway , Activation of Innate immune Response , Carbohydrate Homeostasis , Chromatin Binding , Regulation of Muscle Cell Differentiation , Toll-Like Receptors Cascades

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.
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Application Details

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>
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