

Datasheet for ABIN3093745
MEF2C Protein (AA 1-473) (Strep Tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	MEF2C
Protein Characteristics:	AA 1-473
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MEF2C protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	<p>MGRKKIQITR IMDERNRQVT FTKRKFGLMK KAYELSVLCD CEIALIFNS TNKLFQYAST DMDKVLLKYT EYNEPHESRT NSDIVETLRK KGLNGCDSPD PDADDSVGHS PESEDKYRKI NEDIDLMISR QRLCAVPPPN FEMPVSIPVS SHNSLVYSNP VSSLGNPNLL PLAHPSLQRN SMSPGVTHRP PSAGNTGGLM GGDLTSGAGT SAGNGYGNPR NSPGLLVSPG NLNKNMQAKS PPPMNLGMNN RKPDLRVLP PGSKNTMPSV SEDVDLLLQ RINNSQSAQS LATPVVSVAT PTLPGQGMGG YPSAISTTYG TEYSLSSADL SSLSGFNTAS ALHLGSVTGW QQQHLHNMPP SALSQLGACT STHLSQSSNL SLPSTQSLNI KSEPVSPPRD RTTTPSRYPQ HTRHEAGRSP VDSLSSCSSS YDGSREDHR NEFHSPIGLT RPSPDERESP SVKRMRLSEG WAT</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 have a special request, please contact us.</p>
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 Western blot.

Product Details

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:	MEF2C
Alternative Name:	MEF2C (MEF2C Products)
Background:	<p>Myocyte-specific enhancer factor 2C (Myocyte enhancer factor 2C),FUNCTION: Transcription activator which binds specifically to the MEF2 element present in the regulatory regions of many muscle-specific genes. Controls cardiac morphogenesis and myogenesis, and is also involved in vascular development. Enhances transcriptional activation mediated by SOX18. Plays an essential role in hippocampal-dependent learning and memory by suppressing the number of excitatory synapses and thus regulating basal and evoked synaptic transmission. Crucial for normal neuronal development, distribution, and electrical activity in the neocortex. Necessary for proper development of megakaryocytes and platelets and for bone marrow B-lymphopoiesis. Required for B-cell survival and proliferation in response to BCR stimulation, efficient IgG1 antibody responses to T-cell-dependent antigens and for normal induction of germinal center B-cells. May also be involved in neurogenesis and in the development of cortical architecture (By similarity). Isoforms that lack the repressor domain are more active than isoform 1. {ECO:0000250 UniProtKB:Q8CFN5, ECO:0000269 PubMed:11904443, ECO:0000269 PubMed:15340086, ECO:0000269 PubMed:15831463, ECO:0000269 PubMed:15834131, ECO:0000269 PubMed:9069290, ECO:0000269 PubMed:9384584}.</p>
Molecular Weight:	51.2 kDa
UniProt:	Q06413
Pathways:	Neurotrophin Signaling Pathway , Activation of Innate immune Response , Cellular Response to Molecule of Bacterial Origin , Carbohydrate Homeostasis , Chromatin Binding , Regulation of Muscle Cell Differentiation , Skeletal Muscle Fiber Development , Toll-Like Receptors Cascades , BCR Signaling

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
--------------------	---

Application Details

	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>
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)



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