

# Datasheet for ABIN3136437 **MEF2C Protein (AA 1-474) (Strep Tag)**



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Quantity:	250 μg
Target:	MEF2C
Protein Characteristics:	AA 1-474
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MEF2C protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MGRKKIQITR IMDERNRQVT FTKRKFGLMK KAYELSVLCD CEIALIIFNS TNKLFQYAST
	DMDKVLLKYT EYNEPHESRT NSDIVETLRK KGLNGCDSPD PDADDSVGHS PESEDKYRKI
	NEDIDLMISR QRLCAVPPPS FEMPVTIPVS SHNSLVYSNP VSTLGNPNLL PLAHPSLQRN
	SMSPGVTHRP PSAGNTGGLM GGDLTSGAGT SAGNGYGNPR NSPGLLVSPG NLNKNIQAKS
	PPPMNLGMNN RKPDLRVLIP PGSKNTMPSV SEDVDLLLNQ RINNSQSAQS LATPVVSVAT
	PTLPGQGMGG YPSAISTTYG TEYSLSSADL SSLSGFNTAS ALHLGSVTGW QQQHLHNMPP
	SALSQLGACT STHLSQSSNL SLPSTQSLSI KSEPVSPPRD RTTTPSRYPQ HTTRHEAGRS
	PVDSLSSCSS SYDGSDREDH RNEFHSPIGL TRPSPDERES PSVKRMRLSE GWAT
	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).
Grade:	custom-made

## **Target Details**

Target:	MEF2C	
Alternative Name:	Mef2c (MEF2C Products)	
Background:	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 (PubMed:11554755). May also be involved in neurogenesis and in the development of cortical architecture. Isoforms that lack the repressor domain are more active than isoform 1 (By similarity). 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. {ECO:0000269 PubMed:18086704, ECO:0000269 PubMed:11554755, ECO:0000269 PubMed:18086704, ECO:0000269 PubMed:18438409, ECO:0000269 PubMed:18599437, ECO:0000269 PubMed:18599438, ECO:0000269 PubMed:19211936, ECO:0000269 PubMed:19510205, ECO:0000269 PubMed:9778514}.	
Molecular Weight:	51.3 kDa	
UniProt:	Q8CFN5	
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 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	

### **Application Details**

modifications.

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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 <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	