

# Datasheet for ABIN3105694

## MBOAT4 Protein (AA 1-435) (Strep Tag)



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Quantity:	250 μg
Target:	MBOAT4
Protein Characteristics:	AA 1-435
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MBOAT4 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MEWLWLFFLH PISFYQGAAF PFALLFNYLC IMDSFSTRAR YLFLLTGGGA LAVAAMGSYA
	VLVFTPAVCA VALLCSLAPQ QVHRWTFCFQ MSWQTLCHLG LHYTEYYLHE PPSVRFCITL
	SSLMLLTQRV TSLSLDICEG KVKAASGGFR SRSSLSEHVC KALPYFSYLL FFPALLGGSL
	CSFQRFQARV QGSSALHPRH SFWALSWRGL QILGLECLNV AVSRVVDAGA GLTDCQQFEC
	IYVVWTTAGL FKLTYYSHWI LDDSLLHAAG FGPELGQSPG EEGYVPDADI WTLERTHRIS
	VFSRKWNQST ARWLRRLVFQ HSRAWPLLQT FAFSAWWHGL HPGQVFGFVC WAVMVEADYL
	IHSFANEFIR SWPMRLFYRT LTWAHTQLII AYIMLAVEVR SLSSLWLLCN SYNSVFPMVY
	CILLLLAKR KHKCN
	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:	MBOAT4		
Alternative Name:	MBOAT4 (MBOAT4 Products)		
Background:	Ghrelin O-acyltransferase (EC 2.3.1) (Membrane-bound O-acyltransferase domain-containing		
	protein 4) (O-acyltransferase domain-containing protein 4),FUNCTION: Catalyzes ghrelin		
	acylation at 'Ser-3' using preferentially octanoyl-CoA, hexanoyl-CoA and decanoyl-CoA as acyl-		
	CoA donors leading to ghrelin activity (PubMed:24045953, PubMed:18443287,		
	PubMed:25562443, PubMed:28134508). In vitro uses also acyl-CoA donors of different lengths		
	from short-chain (C2) to long-chain fatty acids (C16) knowing that acyl-CoA donors from		
	butanoyl-CoA (C4) to dodecanoyl-CoA (C12) are more efficient compared to longer acyl-CoA		
	donors, such as myristoyl-CoA (C14) and palmitoyl-CoA (C16) that are not efficient		
	(PubMed:18443287). {ECO:0000269 PubMed:18443287, ECO:0000269 PubMed:24045953,		
	ECO:0000269 PubMed:25562443, ECO:0000269 PubMed:28134508}.		
Molecular Weight:	49.7 kDa		
UniProt:	Q96T53		
Pathways:	Peptide Hormone Metabolism		
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		
	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		
Restrictions:	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		

### 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