

Datasheet for ABIN3117483

DGAT2 Protein (AA 1-388) (Strep Tag)



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Quantity:	250 μg
Target:	DGAT2
Protein Characteristics:	AA 1-388
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DGAT2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MKTLIAAYSG VLRGERQAEA DRSQRSHGGP ALSREGSGRW GTGSSILSAL QDLFSVTWLN
	RSKVEKQLQV ISVLQWVLSF LVLGVACSAI LMYIFCTDCW LIAVLYFTWL VFDWNTPKKG
	GRRSQWVRNW AVWRYFRDYF PIQLVKTHNL LTTRNYIFGY HPHGIMGLGA FCNFSTEATE
	VSKKFPGIRP YLATLAGNFR MPVLREYLMS GGICPVSRDT IDYLLSKNGS GNAIIIVVGG
	AAESLSSMPG KNAVTLRNRK GFVKLALRHG ADLVPIYSFG ENEVYKQVIF EEGSWGRWVQ
	KKFQKYIGFA PCIFHGRGLF SSDTWGLVPY SKPITTVVGE PITIPKLEHP TQQDIDLYHT
	MYMEALVKLF DKHKTKFGLP ETEVLEVN
	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:	DGAT2

Target Details

Alternative Name:	DGAT2 (DGAT2 Products)
Background:	Diacylglycerol O-acyltransferase 2 (EC 2.3.1.20) (Acyl-CoA retinol O-fatty-acyltransferase)
	(ARAT) (Retinol O-fatty-acyltransferase) (EC 2.3.1.76) (Diglyceride acyltransferase
	2),FUNCTION: Essential acyltransferase that catalyzes the terminal and only committed step in
	triacylglycerol synthesis by using diacylglycerol and fatty acyl CoA as substrates. Required for
	synthesis and storage of intracellular triglycerides (PubMed:27184406). Probably plays a
	central role in cytosolic lipid accumulation. In liver, is primarily responsible for incorporating
	endogenously synthesized fatty acids into triglycerides (By similarity). Functions also as an
	acyl-CoA retinol acyltransferase (ARAT) (By similarity). Also able to use 1-monoalkylglycerol (1-
	MAkG) as an acyl acceptor for the synthesis of monoalkyl-monoacylglycerol (MAMAG)
	(PubMed:28420705). {ECO:0000250 UniProtKB:Q9DCV3, ECO:0000269 PubMed:27184406,
	ECO:0000269 PubMed:28420705}.
Molecular Weight:	43.8 kDa
UniProt:	Q96PD7
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
	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!
	For Research Use only
Restrictions:	1 of Nesearch ose only
Restrictions: Handling	1 of Nesearch ose only

Handling

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