Datasheet for ABIN3116639

DAGLB Protein (AA 1-672) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	DAGLB
Protein Characteristics:	AA 1-672
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DAGLB protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MPGMVLFGRR WAIASDDLVF PGFFELVVRV LWWIGILTLY LMHRGKLDCA GGALLSSYLI VLMILLAVVI CTVSAIMCVS MRGTICNPGP RKSMSKLLYI RLALFFPEMV WASLGAAWVA DGVQCDRTVV NGIIATVVVS WIIIAATVVS IIIVFDPLGG KMAPYSSAGP SHLDSHDSSQ LLNGLKTAAT SVWETRIKLL CCCIGKDDHT RVAFSSTAEL FSTYFSDTDL VPSDIAAGLA LLHQQQDNIR NNQEPAQVVC HAPGSSQEAD LDAELENCHH YMQFAAAAYG WPLYIYRNPL TGLCRIGGDC CRSRTTDYDL VGGDQLNCHF GSILHTTGLQ YRDFIHVSFH DKVYELPFLV ALDHRKESVV VAVRGTMSLQ DVLTDLSAES EVLDVECEVQ DRLAHKGISQ AARYVYQRLI NDGILSQAFS IAPEYRLVIV GHSLGGGAAA LLATMLRAAY PQVRCYAFSP PRGLWSKALQ EYSQSFIVSL VLGKDVIPRL SVTNLEDLKR RILRVVAHCN KPKYKILLHG LWYELFGGNP NNLPTELDGG DQEVLTQPLL GEQSLLTRWS PAYSFSSDSP LDSSPKYPPL YPPGRIIHLQ EEGASGRFGC CSAAHYSAKW SHEAEFSKIL IGPKMLTDHM PDILMRALDS VVSDRAACVS CPAQGVSSVD VA

	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®):

Product Details

	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.
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:	DAGLB
Alternative Name:	DAGLB (DAGLB Products)
Background:	Diacylglycerol lipase-beta (DAGL-beta) (DGL-beta) (EC 3.1.1.116) (KCCR13L) (PUFA-specific triacylglycerol lipase) (EC 3.1.1.3) (Sn1-specific diacylglycerol lipase beta),FUNCTION: Lipase that catalyzes the hydrolysis of arachidonic acid (AA)-esterified diacylglycerols (DAGs) to produce the principal endocannabinoid, 2-arachidonoylglycerol (2-AG) which can be further cleaved by downstream enzymes to release arachidonic acid (AA) for cyclooxygenase (COX)-mediated eicosanoid production (PubMed:14610053). Preferentially hydrolyzes DAGs at the sn-1 position in a calcium-dependent manner and has negligible activity against other lipids including monoacylglycerols and phospholipids (PubMed:14610053). Plays a key role in the regulation of 2-AG and AA pools utilized by COX1/2 to generate lipid mediators of macrophage and microglia inflammatory responses. Functions also as a polyunsaturated fatty acids-specific triacylglycerol lipase in macrophages. Plays an important role to support the metabolic and signaling demands of macrophages (By similarity). {ECO:0000250|UniProtKB:Q91WC9, ECO:0000269|PubMed:14610053}.
Molecular Weight:	73.7 kDa
UniProt:	Q8NCG7

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.

Application Details

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!
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