Datasheet for ABIN3135851

DAGLA Protein (AA 1-1044) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	DAGLA
Protein Characteristics:	AA 1-1044
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DAGLA protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MPGIVVFRRR WSVGSDDLVL PAIFLFLLHT TWFVILSVVL FGLVYNPHEA CSLNLVDHGR GYLGILLSCM IAEMAIIWLS MRGGILYTEP RDSMQYVLYV RLAILVIEFI YAIVGIVWLT QYYTSCNDLT AKNVTLGMVV CNWVVILSVC ITVLCVFDPT GRTFVKLRAT KRRQRNLRTY NLRHRLEEGQ ATSWSRRLKV FLCCTRTKDS QSDAYSEIAY LFAEFFRDLD IVPSDIIAGL VLLRQRQRAK RNAVLDEANN DILAFLSGMP VTRNTKYLDL KNSHEMLRYK EVCYYMLFAL AAYGWPMYLM RKPTCGLCQL ARSCSCCLCP ARPRFAPGVT IEEDNCCGCN AIAIRRHFLD ENMTAVDIVY TSCHDAVYET PFYVAVDHDK KKVVISIRGT LSPKDALTDL TGDAERLPVE GHRGTWLGHK GMVLSAEYIK KKLEQEMVLS QAFGRDLGRG TKHYGLIVVG HSLGAGTAAI LSFLLRPQYP TLKCFAYSPP GGLLSEDAME YSKEFVTAVV LGKDLVPRIG LSQLEGFRRQ LLDVLQRSTK PKWRIIVGAT KCIPKSELPE DQVEVTTLAS TRLWTHPSDL TIALSASTPL YPPGRIIHVV HNHPAEQCCC CEQEEPTYFA IWGDNKAFNE VIISPAMLHE HLPYVVMEGL

NKVLENYNKG KTALLSAAKV MVSPTEVDLT PELIFQQQPL PTGPPLPTGL ALELPATEHR NSSVRSKSQS EMSLEGFSEG RLLSPVAAAS AARQDPVELL LLSTQERLAA ELQSRRAPLA TMESLSDTES LYSFDSRRSS GFRSIRGSPS LHAVLERDEG HLFYIDPAIP EENPSLSSRT ELLAADSLSK HSQDTQPLEA ALGSGGVTPE RPPSATIEEE EAAGGSEGGG VAPRGELALH NGRLGDSPSP QVLEFAEFID SLFNLDSKSS SFQDLYCMMV PESPTSDYTE GPKSPSQQEI LLRAQFEPNL VPKPPRLFAG SAEPSSGISL SPSFPLSSSG ELMDLTPTGL SSQECLATDK IRTSTPTGHG ASPTKQDDLV ISAR

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 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.

Product Details

- 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:	DAGLA
Alternative Name:	Dagla (DAGLA Products)
Background:	Diacylglycerol lipase-alpha (DAGL-alpha) (DGL-alpha) (EC 3.1.1.116) (Neural stem cell-derived dendrite regulator) (Sn1-specific diacylglycerol lipase alpha),FUNCTION: Serine hydrolase that hydrolyzes arachidonic acid-esterified diacylglycerols (DAGs) to produce the principal endocannabinoid (eCB), 2-arachidonoylglycerol (2-AG) (PubMed:17584991, PubMed:23103940). Preferentially hydrolyzes sn-1 fatty acids from diacylglycerols (DAG) that contain arachidonic acid (AA) esterified at the sn-2 position to biosynthesize 2-AG. Has negligible activity against other lipids including monoacylglycerols and phospholipids (PubMed:17584991). Plays a key role in regulating 2-AG signaling in the central nervous system (CNS) (PubMed:20159446, PubMed:20147530, PubMed:25466252, PubMed:26668358, PubMed:26779719). Controls the activity of 2-AG as a retrograde messenger at neuronal synapses (PubMed:20159446, PubMed:20147530, PubMed:26668358). Supports axonal growth during development and adult neurogenesis (PubMed:20147530). Plays a role for eCB signaling in the physiological regulation of anxiety and depressive behaviors (PubMed:25466252). Regulates also neuroinflammatory responses in the brain, in particular, LPS-induced microglial activation (PubMed:26779719). {ECO:0000269|PubMed:17584991, ECO:0000269|PubMed:20147530, ECO:0000269|PubMed:20159446, ECO:0000269|PubMed:23103940, ECO:0000269|PubMed:25466252, ECO:0000269|PubMed:26668358, ECO:0000269|PubMed:26779719}.
Molecular Weight:	115.4 kDa
UniProt:	Q6WQJ1

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!
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 **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