

Datasheet for ABIN7564154 **DAGLA Protein (AA 1-1044) (His tag)**



Overview

Quantity:	1 mg
Target:	DAGLA
Protein Characteristics:	AA 1-1044
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DAGLA protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Dagla Protein expressed in mammalian cells.
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 Purification-Tag is
based on experiences 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.

Specificity:

If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, 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:25466252, ECO:0000269|PubMed:23103940, ECO:0000269|PubMed:25466252, ECO:0000269|PubMed:26668358, ECO:0000269|PubMed:26779719}.

Molecular Weight: 115.4 kDa

UniProt: 06WOJ1

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months