

Datasheet for ABIN7565181 **DLC1 Protein (AA 1-1092) (His tag)**



Overview

Quantity:	1 mg
Target:	DLC1
Protein Characteristics:	AA 1-1092
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DLC1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Dlc1 Protein expressed in mammalian cells.
Sequence:	MCRDEPDTMI LTQIEAKEAC DWLRVTGFPQ YAQLYEDLLF PVDIALVKRE HDFLDRDAIE
	ALCRRLNTLN KCAVMKLEIS PHRKRSEDSD EDEPCAISGK WTFQRDSKRW SRLEEFDVFF
	PKQDPIPGSP DNSRLQSATS HESMLTDLSE HQEVASVRSL SSTSSSVPTH AAHSGDATTP
	RTNSVISVCS SGHFVGNDDS FSSLPSPKEL SSFSFSMKGH HEKNTKSKTR SLLKRMESLK
	LKGSHHSKHK APSKLGLIIS APILQEGMDE AKLKQLNCVE ISALNGNHIN VPMVRKRSVS
	NSTQTSSSSS QSETSSAVST PSPVTRTRSL STCNKRVGMY LEGFDPFSQS TLNNVTEQNY
	KNRESYPEDT VFYIPEDHKP GTFPKALSHG SFCPSGNSSV NWRTGSFHGP GHLSLRRENS
	HDSPKELKRR NSSSSLSSRL SIYDNVPGSI LYSSSGELAD LENEDIFPEL DDILYHVKGM
	QRIVNQWSEK FSDEGDSDSA LDSVSPCPSS PKQIHLDVDH DRRTPSDLDS TGNSLNEPEE
	PTDIPERRDS GVGASLTRCN RHRLRWHSFQ SSHRPSLNSV SLQINCQSVA QMNLLQKYSL
	LKLTALLEKY TPSNKHGFSW AVPKFMKRIK VPDYKDRSVF GVPLTVNVQR SGQPLPQSIQ
	QAMRYLRNHC LDQVGLFRKS GVKSRIQALR QMNESAEDNV NYEGQSAYDV ADMLKQYFRD

	LPEPLMTNKL SETFLQIYQY VPKDQRLQAI KAAIMLLPDE NREVLQTLLY FLSDVTAAVK
	ENQMTPTNLA VCLAPSLFHL NTLKRENSSP RVMQRKQSLG KPDQKDLNEN LAATQGLAHM
	IAECKKLFQV PEEMSRCRNS YTEQELKPLT LEALGHLNSD QPADYRHFLQ DCVDGLFKEV
	KEKFKGWVSY PTSEQADLSY KKVSEGPPLR LWRSTIEVPA APEEILKRLL KEQHLWDVDL
	LDSKVIEILD SQTEIYQYVQ NSMAPHPARD YVVLRTWRTN LPRGACALLL TSVDHDRAPV
	AGVRVNVLLS RYLIEPCGSG KSKLTYMCRA DLRGHMPEWY SKSFGHLCAA EVVKIRDSFS
	NQNTESKDTR SR 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	
	DL 04
Target:	DLC1
Alternative Name:	Dlc1 (DLC1 Products)
Background:	Rho GTPase-activating protein 7 (Deleted in liver cancer 1 protein homolog) (DLC-1) (Rho-type
	GTPase-activating protein 7) (START domain-containing protein 12) (StARD12) (StAR-related

lipid transfer protein 12),FUNCTION: Functions as a GTPase-activating protein for the small GTPases RHOA, RHOB, RHOC and CDC42, terminating their downstream signaling. This induces morphological changes and detachment through cytoskeletal reorganization, playing a critical role in biological processes such as cell migration and proliferation. Also functions in vivo as an activator of the phospholipase PLCD1. Active DLC1 increases cell migration velocity but reduces directionality (By similarity). Required for growth factor-induced epithelial cell migration, in resting cells, interacts with TNS3 while PTEN interacts with the p85 regulatory subunit of the PI3K kinase complex but growth factor stimulation induces phosphorylation of TNS3 and PTEN, causing them to change their binding preference so that PTEN interacts with DLC1 and TNS3 interacts with p85 (By similarity). The PTEN-DLC1 complex translocates to the posterior of migrating cells to activate RHOA while the TNS3-p85 complex translocates to the leading edge of migrating cells to promote RAC1 activation (By similarity). {ECC:0000250|UniProtKB:Q96QB1}.

Molecular Weight:	123.4 kDa
UniProt:	Q9R0Z9

Pathways: Tube Formation, Positive Regulation of Endopeptidase Activity

Application Details

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

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