

Datasheet for ABIN3095024

DLC1 Protein (AA 1-1528) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	DLC1
Protein Characteristics:	AA 1-1528
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DLC1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MSVAIRKRSW EEHVTHWMGQ PFNSDDRNTA CHHGLVADSL QASMEKDATL NVDRKEKCVS
 LPDCCHGSEL RDFPGRPMGH LSKDVDENDS HEGEDQFLSL EASTETLVHV SDEDNNADLC
 LTDDKQVLNT QGQKTSGQHM IQGAGSLEKA LPIIQSNQVS SNSWGIAGET ELALVKESGE
 RKVTDSISKS LELCNEISLS EIKDAPKVNA VDTLNVKDIA PEKQLLNSAV IAQRRKPPDP
 PKDENERSTC NVVQNEFLDT PCTNRGLPLL KTDFGSCLLQ PPSCPNGMSA ENGLEKSGFS
 QHQNKSPPKV KAEDGMQCLQ LKETLATQEP TDNQVRLRKR KEIREDRDRA RLDSMVLIM
 KLDQLDQDIE NALSTSSSPS GTPTNLRRHV PDLESGSESG ADTISVNQTR VNLSSDTEST
 DLPSSTPVAN SGTGPKTTAI QGISEKEKAE IEAKEACDWL RATGFPQYAQ LYEDFLFPID
 ISLVKREHDF LDRDAIEALC RRLNLTNKA VMKLEISPHR KRSDSDSEDE PCAISGKWTF
 QRDSKRWSRL EEFDFVSPKQ DLVPGSPDDS HPKDGPSPGG TLMDLSERQE VSSVRSLSST
 GSLPSHAPPS EDAATPRTNS VISVCSNNL AGNDDSFGL PSPKELSSFS FSMKGHEKTA
 KSKTRSLKLR MESLKLKSSH HSKHKAPSKL GLIISGPILQ EGMDEEKLKQ LNCVEISALN

GNRINVPMVR KRSVSNSTQT SSSSSQSETS SAVSTPSPVT RTRSLSACNK RVGMYLEGFD
PFNQSTFNNV VEQNFKNRES YPEDTVFYIP EDHKPGTFPK ALTNGSFSPS GNNGSVNWRT
GSFHGPGHIS LRRENSSDSP KELKRRNSSS SMSSRLSIYD NVPGSILYSS SGDLADLENE
DIFPELDDIL YHVKGMQRIV NQWSEKFSDE GSDSALDSV SPCPSSPKQI HLDVDNDRTT
PSDLSTGNS LNEPEEPSEI PERRDSGVGA SLTRSNRHRL RWHSFQSSHR PSLNSVSLQI
NCQSVAQMNL LQKYSLLKLT ALLEKYTPSN KHGFSWAVPK FMKRIKVPDY KDRSVFGVPL
TVNVQRTGQP LPQSIQQAMR YLRNHCLDQV GLFRKSGVKS RIQALRQMNE GAIDCVNYEG
QSAYDVADML KQYFRDLPEP LMTNKLSETF LQIQYVVPKD QRLQAIKAAI MLLPDENREV
LQTLLYFLSD VTAAVKENQM TPTNLAVCLA PSLFHLNLTk RENSSPRVMQ RKQSLGKPDQ
KDLNENLAAT QGLAHMIAEC KKLfQVPEEM SRCRNsyTEQ ELKPLTLEAL GHLGNDDSD
YQHFLQDCVD GLFKEVKEKF KGWVSystSE QAELSYKKVS EGPPLRLWRS VIEVPAVPEE
ILKRLKEQH LWDVDLLDSK VIEILDSQTE IYQYVQNSMA PHPARDYVVL RTWRTNLPKG
ACALLLTSVD HDRAPVVGVR VNVLLSRYLI EPCGPGKSKL TYMCRVDLRG HMPEWYTKSF
GHLCAAevVK IRDSFSNqNT ETKDTKSR

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.

Product Details

- 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®): <ol style="list-style-type: none">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:	DLC1
Alternative Name:	DLC1 (DLC1 Products)
Background:	Rho GTPase-activating protein 7 (Deleted in liver cancer 1 protein) (DLC-1) (HP protein) (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

Target Details

but reduces directionality. 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 (PubMed:26166433). 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 (PubMed:26166433).
{ECO:0000269|PubMed:18786931, ECO:0000269|PubMed:19170769, ECO:0000269|PubMed:19710422, ECO:0000269|PubMed:26166433}.

Molecular Weight: 170.6 kDa

UniProt: [Q96QB1](#)

Pathways: [Tube Formation](#), [Positive Regulation of Endopeptidase Activity](#)

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. If you have a special request, please contact us.

Handling

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