

Datasheet for ABIN3131313

Dynactin 1 Protein (DCTN1) (AA 1-1281) (Strep Tag)



Overview

Quantity:	250 μg
Target:	Dynactin 1 (DCTN1)
Protein Characteristics:	AA 1-1281
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Dynactin 1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MAQSRRHMSS RTPSGSRMST EASARPLRVG SRVEVIGKGH RGTVAYVGAT LFATGKWVGV
	ILDEAKGKND GTVQGRKYFT CDEGHGIFVR QSQIQVFEDG ADTTSPETPD SSASKVLKRE
	GADAAAKTSK LRGLKPKKAP TARKTTTRRP KPTRPASTGV AGPSSSLGPS GSASAGELSS
	SEPSTPAQTP LAAPIIPTPA LTSPGAAPPL PSPSKEEEGL RAQVRDLEEK LETLRLKRSE
	DKAKLKELEK HKIQLEQVQE WKSKMQEQQA DLQRRLKEAR KEAKEALEAK ERYMEEMADT
	ADAIEMATLD KEMAEERAES LQQEVEALKE RVDELTTDLE ILKAEIEEKG SDGAASSYQL
	KQLEEQNARL KDALVRMRDL SSSEKQEHVK LQKLMEKKNQ ELEVVRQQRE RLQEELSQAE
	STIDELKEQV DAALGAEEMV EMLTDRNLNL EEKVRELRET VGDLEAMNEM NDELQENARE
	TELELREQLD MAGARVREAQ KRVEAAQETV ADYQQTIKKY RQLTAHLQDV NRELTNQQEA
	SVERQQQPPP ETFDFKIKFA ETKAHAKAIE MELRQMEVAQ ANRHMSLLTA FMPDSFLRPG
	GDHDCVLVLL LMPRLICKAE LIRKQAQEKF DLSENCSERP GLRGAAGEQL SFAAGLVYSL

SLLQATLHRY EHALSQCSVD VYKKVGSLYP EMSAHERSLD FLIELLHKDQ LDETVNVEPL
TKAIKYYQHL YSIHLAEQPE DSTMQLADHI KFTQSALDCM GVEVGRLRAF LQGGQEATDI
ALLLRDLETS CSDTRQFCKK IRRRMPGTDA PGIPAALAFG SQVSDTLLDC RKHLTWVVAV
LQEVAAAAAQ LIAPLAENEG LPVAALEELA FKASEQIYGS PSSSPYECLR QSCTILISTM
NKLATAMQEG EYDAERPPSK PPPVELRAAA LRAEITDAEG LGLKLEDRET VIKELKKSLK
IKGEELSEAN VRLSLLEKKL DSAAKDADER IEKVQTRLDE TQTLLRKKEK DFEETMDALQ
ADIDQLEAEK AELKQRLNSQ SKRTIEGLRG PPPSGIATLV SGIAGEEPQR GGAPGQAPGA
LPGPGLVKDS PLLLQQISAM RLHISQLQHE NSILRGAQMK ASLAALPPLH VAKLSLPPHE
GPGGNLVAGA LYRKTSQLLE KLNQLSTHTH VVDITRSSPA AKSPSAQLME QVAQLKSLSD
TIEKLKDEVL KETVTQRPGA TVPTDFATFP SSAFLRAKEE QQDDTVYMGK VTFSCAAGLG
QRHRLVLTQE QLHQLHSRLI S

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 posttranslational 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 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: Dynactin 1 (DCTN1)

Alternative Name:

Dctn1 (DCTN1 Products)

Background:

Dynactin subunit 1 (150 kDa dynein-associated polypeptide) (DAP-150) (DP-150) (p150glued), FUNCTION: Part of the dynactin complex that activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity). Plays a key role in dyneinmediated retrograde transport of vesicles and organelles along microtubules by recruiting and tethering dynein to microtubules. Binds to both dynein and microtubules providing a link between specific cargos, microtubules and dynein. Essential for targeting dynein to microtubule plus ends, recruiting dynein to membranous cargos and enhancing dynein processivity (the ability to move along a microtubule for a long distance without falling off the track). Can also act as a brake to slow the dynein motor during motility along the microtubule. Can regulate microtubule stability by promoting microtubule formation, nucleation and polymerization and by inhibiting microtubule catastrophe in neurons. Inhibits microtubule catastrophe by binding both to microtubules and to tubulin, leading to enhanced microtubule stability along the axon. Plays a role in metaphase spindle orientation. Plays a role in centriole cohesion and subdistal appendage organization and function. Its recruitment to the centriole in a KIF3A-dependent manner is essential for the maintenance of centriole cohesion and the formation of subdistal appendage. Also required for microtubule anchoring at the mother centriole. Plays a role in primary cilia formation (By similarity). {ECO:0000250|UniProtKB:A0A287B8J2, ECO:0000250|UniProtKB:Q14203}.

Tarnet Details

Target Details		
Molecular Weight:	141.7 kDa	
UniProt:	008788	
Pathways:	M Phase, ER-Nucleus Signaling	
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	
Duffor	The buffer commentation is at the discussion of the many fact way	

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