

### Datasheet for ABIN7553616

# Dynactin 1 Protein (DCTN1) (AA 1-1278) (His tag)



### Overview

Quantity:	1 mg
Target:	Dynactin 1 (DCTN1)
Protein Characteristics:	AA 1-1278
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Dynactin 1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### **Product Details**

Purpose:	Custom-made recombinat DCTN1 Protein expressed in mammalien cells.
Sequence:	MAQSKRHVYS RTPSGSRMSA EASARPLRVG SRVEVIGKGH RGTVAYVGAT LFATGKWVGV
	ILDEAKGKND GTVQGRKYFT CDEGHGIFVR QSQIQVFEDG ADTTSPETPD SSASKVLKRE
	GTDTTAKTSK LRGLKPKKAP TARKTTTRRP KPTRPASTGV AGASSSLGPS GSASAGELSS
	SEPSTPAQTP LAAPIIPTPV LTSPGAVPPL PSPSKEEEGL RAQVRDLEEK LETLRLKRAE
	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 ELSENCSERP GLRGAAGEQL SFAAGLVYSL

SLLQATLHRY EHALSQCSVD VYKKVGSLYP EMSAHERSLD FLIELLHKDQ LDETVNVEPL
TKAIKYYQHL YSIHLAEQPE DCTMQLADHI KFTQSALDCM SVEVGRLRAF LQGGQEATDI
ALLLRDLETS CSDIRQFCKK IRRRMPGTDA PGIPAALAFG PQVSDTLLDC RKHLTWVVAV
LQEVAAAAAQ LIAPLAENEG LLVAALEELA FKASEQIYGT PSSSPYECLR QSCNILISTM
NKLATAMQEG EYDAERPPSK PPPVELRAAA LRAEITDAEG LGLKLEDRET VIKELKKSLK
IKGEELSEAN VRLSLLEKKL DSAAKDADER IEKVQTRLEE TQALLRKKEK EFEETMDALQ
ADIDQLEAEK AELKQRLNSQ SKRTIEGLRG PPPSGIATLV SGIAGEEQQR GAIPGQAPGS
VPGPGLVKDS PLLLQQISAM RLHISQLQHE NSILKGAQMK ASLASLPPLH VAKLSHEGPG
SELPAGALYR KTSQLLETLN QLSTHTHVVD ITRTSPAAKS PSAQLMEQVA QLKSLSDTVE
KLKDEVLKET VSQRPGATVP TDFATFPSSA FLRAKEEQQD DTVYMGKVTF SCAAGFGQRH
RLVLTQEQLH QLHSRLIS 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.

#### Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien 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, Western Blot

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) (p135) (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 (PubMed:25185702). 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 (PubMed:23874158). Plays a role in metaphase spindle orientation (PubMed:22327364). 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 (PubMed:23386061). Plays a role in primary cilia formation (PubMed:25774020). {ECO:0000250|UniProtKB:A0A287B8J2, ECO:0000269|PubMed:22327364, ECO:0000269|PubMed:23386061, ECO:0000269|PubMed:23874158, ECO:0000269|PubMed:25185702, ECO:0000269|PubMed:25774020}.

Molecular Weight: 141.7 kDa

UniProt: Q14203

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.

Restrictions: For Research Use only

Handling

Format: Liquid

## Handling

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