

Datasheet for ABIN3092152

Dynein Regulatory Complex Subunit 1 (DRC1) (AA 1-740) protein (Strep Tag)



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Overview

Quantity:	250 µg
Target:	Dynein Regulatory Complex Subunit 1 (DRC1)
Protein Characteristics:	AA 1-740
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	Strep Tag
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MNPPGSLEAL DPNVDEHLST QILAPSVHSD NSQERIQARR LRIAARLEAR RREALGEYLD</p> <p>GKKESEEDQS KSYKQKEESR LKLAKLLLCG TELVTNIQVA IDIREIHRRV EEEEIKRQRI</p> <p>EKLENEVKTS QDKFDEITSK WEEGKQKRIP QELWEMPLNTQ QLHCAGLLED KNKLISELQQ</p> <p>ELKTKDDQYV KDLKKQSDDI CLLLERMEEQ VKNVMKTFRE ELYNIEKAFF VERQELLASN</p> <p>KKKWEQALQA HNAKELEYLN NRMKKVEDYE KQLNRQRIWD CEEYNMIKIK LEQDVQILEQ</p> <p>QLQQRKAIYQ LNQEKLEYNL QVLKKRDEES TVIKSQQKRK INRLHDILNN LRSKYAKQIK</p> <p>QFQEENQSLT SDYKRLVMQF KELQKAMRHF ALIDDEKFEW IWLNMNEEEAK DLIARAFDVD</p> <p>RIIHTHHLGL PWAAPDFWFL NNVGPISQQP QKSATQIVVE MLMRSEEEEA EAAAAEPESY</p> <p>LDLPKQISEK TTKRILMLLC DESGFLIESK LLSLLPLEQ NECYLLRLDA IFSALGIESE DDLYKLVNFF</p> <p>LKYRAHRLSS SLQIKPCSQA SMEKASMEET STRSELELAE QTEMEGEKEE SLVEGEKEEE</p> <p>EETPPSPWVI HPNDVLKILE AFVMGLKKPR DSRAPLRVQK NVRDNSKDSE YWQALTTVIP</p>

SSKQNLWDAL YTALEKYHLV LTQRAKLLLE NSSLEQQNTE LQALLQQYLN SKINSELQVP
PTQVLRVPTK

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 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!

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®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: Dynein Regulatory Complex Subunit 1 (DRC1)

Alternative Name: DRC1 ([DRC1 Products](#))

Background: Dynein regulatory complex protein 1 (Coiled-coil domain-containing protein 164),FUNCTION: Component of the nexin-dynein regulatory complex (N-DRC) a key regulator of ciliary/flagellar motility which maintains the alignment and integrity of the distal axoneme and regulates microtubule sliding in motile axonemes (By similarity). Plays a critical role in the assembly of N-DRC and also stabilizes the assembly of multiple inner dynein arms and radial spokes (PubMed:23354437, PubMed:34169321). Coassembles with CCDC65/DRC2 to form a central scaffold needed for assembly of the N-DRC and its attachment to the outer doublet microtubules (PubMed:23354437). {ECO:0000250|UniProtKB:P0DL09, ECO:0000269|PubMed:23354437, ECO:0000269|PubMed:34169321}.

Molecular Weight: 87.1 kDa

UniProt: [Q96MC2](#)

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!

Application Details

Restrictions: For Research Use only

Handling

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