

Datasheet for ABIN3136763

RECQL5 Protein (AA 1-982) (Strep Tag)



Overview

Quantity:	250 μg
Target:	RECQL5
Protein Characteristics:	AA 1-982
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RECQL5 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MSARPFSTPF DRERRVRSTL KKVFGFDSFK TPLQESATMA VVKGAEDVFV CMPTGAGKSL
4	CYQLPALLAS GITIVVSPLI ALIQDQVDHL LALKVQVSSL NSKLSVQERK ELLSDLERDK
	PRTKLLYITP EMAASASFQP TLNSLVSRNL LSYLVVDEAH CVSQWGHDFR PDYLRLGALR
	SRLAHAPCVA LTATATPQVQ EDVFAALHLK QPVASFKTPC FRANLFYDVQ FKELIPDVYG
	NLRDFCLKAL GQKAENGSSS GCGIVYCRTR EACEQLAIEL SSRGVNAKAY HAGLKASDRT
	QVQNEWMEEK VPVIVATISF GMGVDKANVR FVAHWNIAKS MAGYYQESGR AGRDGKPSWC
	RLYYSRNDRD QVSFLIRKEL AKLQEKRGNK PSDKATLLAF DALVTFCEEV GCRHAAIAKY
	FGDAPPACAK GCDYCQNPAA ITKKLDALER SSSWSKTCIG PSQGNGFDPE LYEGGRRGYG
	GFSRYDEGSG GSGDEGRDEA HKREWNLFYQ KQMSLRKGKE PKIEEFTPPD EDCPLREASS
	RKIPKLTVKA REHCLRLLEE ALISNHQAAG STHGADLQAK AVELEHETFR NAKMVNLYKA
	SVLKKVAEIH KASKDGQLYD MESGTKSCGA AAEFSEPSDY DIPPTSHVYS LKPKRVGAGF

SKGPCSFQTA TELLGKSHSQ KQAPEAMLEG GQEPPGWVCD LQDEDRSKPH PGYQEKALGS SVNCGDPSPE KKTKGSSQGS AKARASKKQQ LLATAARKDS QNITRFLCQR TESPPLPASV PRSEDASPSC GDVPGKCTQE VGAQGHLVAV FQTEGPRERP STCSLRDQSF PEGQPSPLKE TQAEKRPRPQ QGNPERRAQK RLRPSTKSSI LAEAKDSTLA SDRSTENKVA QEPCQLSASG TSLREAADIV VRHLTPFYKE GRFISKDLFK GFARHLSHLL AQQLSPGRSV KEEAQSLIKQ FFHNRARCES EADWHSLRGP QR

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.

Froduct Details	
	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:	RECQL5
Alternative Name:	Recql5 (RECQL5 Products)
Background: Molecular Weight:	ATP-dependent DNA helicase Q5 (EC 5.6.2.4) (DNA 3'-5' helicase RecQ5) (DNA helicase, RecQ-like type 5) (RecQ5) (RECQL5beta) (RecQ protein-like 5),FUNCTION: DNA helicase that plays an important role in DNA replication, transcription and repair. Binds to the RNA polymerase II subunit POLR2A during transcription elongation and suppresses transcription-associated genomic instability. Associates also with POLR1A and enforces the stability of ribosomal DNA arrays. Plays an important role in mitotic chromosome separation after cross-over events and cell cycle progress. Mechanistically, removes RAD51 filaments protecting stalled replication forks at common fragile sites and stimulates MUS81-EME1 endonuclease leading to mitotic DNA synthesis. Required for efficient DNA repair, including repair of inter-strand cross-links. Stimulates DNA decatenation mediated by TOP2A. Prevents sister chromatid exchange and homologous recombination. {ECO:0000250 UniProtKB:094762}.
UniProt:	Q8VID5
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.

Application 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!

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