

Datasheet for ABIN3095201

RTEL1 Protein (AA 1-1219) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	RTEL1
Protein Characteristics:	AA 1-1219
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RTEL1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MPKIVLNGVT VDFPFQPYKC QQEYMTKVLE CLQQKVNIGIL ESPTGTGKTL CLLCTTLAWR</p> <p>EHLRDGISAR KIAERAQGEL FPDRLSSWG NAAAAAGDPI ACYTDIPKII YASRTHSQLT</p> <p>QVINELRNTS YRPKVCVLGS REQLCIHPEV KKQESNHLQI HLCRKKVASR SCHFYNNVEE</p> <p>KSLEQELASP ILDIEDLVKS GSKHRVCPYY LSRNLKQQAD IIFMPYNYLL DAKSRRAHNI</p> <p>DLKGTVVIFD EAHNVEKMCE ESASFDLTPH DLASGLDVID QVLEEQTCAA QQGEHPPEFS</p> <p>ADSPSPGLNM ELEDIAKLKM ILLRLEGAID AVELPGDDSG VTKPGSYIFE LFAEAQITFQ</p> <p>TKGCILDSLD QIIQHLAGRA GVFTNTAGLQ KLADIIQIVF SVDPSEGSPP SPAGLGALQS</p> <p>YKVHIHPDAG HRRTAQRSDA WSTTAARKRG KVLSYWCFSP GHSMHELVRQ GVRSLILTSG</p> <p>TLAPVSSFAL EMQIPFPVCL ENPHIIDKHQ IWVGWVPRGP DGAQLSSAFD RRFSEECCLSS</p> <p>LGKALGNIAR VVPYGLLIFF PSYPVMEKSL EFWRARDLAR KMEALKPLFV EPRSKGSFSE</p> <p>TISAYYARVA APGSTGATFL AVCRGKASEG LDFSDTNGRG VIVTGLPYPP RMDPRVVLKM</p>

QFLDEMKGGQ GAGGQFLSGQ EWYRQQASRA VNQAIGRVIR HRQDYGAVFL CDHRFAFADA
RAQLPSWVRP HVRVYDNFGH VIRDVAQFFR VAERTMPAPA PRATAPSVRG EDAVSEAKSP
GPFFSTRKAK SLDLHVPSLK QRSSGSPAAG DPESLCEVEY EQEPVPARQR PRGLLALEH
SEQRAGSPGE EQAHSCSTLS LLSEKRPAEE PRGGRKKIRL VSHPEEPVAG AQTDRAKLFM
VAVKQELSQA NFATFTQALQ DYKGSDDFAA LAACLGPLFA EDPKKHNLLQ GFYQFVRPHH
KQQFEEVCIQ LTGRGCGYRP EHSIPRRQRA QPVLDPGTGR APDPKLTVST AAAQQLDPQE
HLNQGRPHLS PRPPPTGDPG SQPQWGSQVP RAGKQGQHAV SAYLADARRA LGSAGCSQLL
AALTAYKQDD DLDKVLAVLA ALTTAKPEDF PLLHRFSMFV RPHHKQRFSSQ TCTDLTGPRY
PGMEPPGPQE ERLAVPPVLT HRAPQGPSR SEKTGKTQSK ISSFLRQRPA GTVGAGGEDA
GPSQSSGPPH GPAASEWGL

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!

Product Details

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:	RTEL1
Alternative Name:	RTEL1 (RTEL1 Products)
Background:	Regulator of telomere elongation helicase 1 (EC 3.6.4.12) (Novel helicase-like),FUNCTION: ATP-dependent DNA helicase implicated in telomere-length regulation, DNA repair and the maintenance of genomic stability. Acts as an anti-recombinase to counteract toxic recombination and limit crossover during meiosis. Regulates meiotic recombination and crossover homeostasis by physically dissociating strand invasion events and thereby promotes noncrossover repair by meiotic synthesis dependent strand annealing (SDSA) as well as disassembly of D loop recombination intermediates. Also disassembles T loops and prevents telomere fragility by counteracting telomeric G4-DNA structures, which together ensure the dynamics and stability of the telomere. {ECO:0000255 HAMAP-Rule:MF_03065, ECO:0000269 PubMed:18957201, ECO:0000269 PubMed:23453664, ECO:0000269 PubMed:24009516}.
Molecular Weight:	133.7 kDa
UniProt:	Q9NZ71

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.
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Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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Restrictions:	For Research Use only
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Handling

Format:	Liquid
Buffer:	<p>The buffer composition is at the discretion of the manufacturer.</p> <p>Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.</p>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months