

Datasheet for ABIN3094889
RBM20 Protein (AA 1-1227) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	RBM20
Protein Characteristics:	AA 1-1227
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RBM20 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Sequence:	MVLAAAMSQD ADPSGPEQPD RVACSVPGAR ASPAPSGPRG MQQPPPPQP PPPQAGLPQ IIQNAAKLLD KNPFSVSNPN PLLPSPASLQ LAQLQAQLTL HRLKLAQTAV TNNTAAATVL NQVLSKVAMS QPLFNQLRHP SVITGPHGHA GVPQHAAAI STRFPSNAIA FSPPSQTRGP GPSMNLPNQP PSAMVMHPFT GVMPQTPGQP AVILGIGKTG PAPATAGFYE YGKASSGQTY GPETDGQPGF LPSSASTSGS VTYEGHYSHT GQDGQAAFSK DFYGPNSQGS HVASGFPAEQ AGGLKSEVGP LLQGTNSQWE SPHGFSGQSK PDLTAGPMWP PPHNQPYELY DPEEPTSDRT PPSFGGRLNN SKQGFIGAGR RAKEDQALLS VRPLQAHELN DFHGVAPLHL PHICSICDKK VFDLKDWEH VKGKLHAQKC LVFSENAGIR CILGSAEGL CASPNSTAVY NPAGNEDYAS NLGTSYVIP ARSFTQSSPT FPLASVGTTF AQRKGAGRVV HICNLPEGSC TENDVINLGL PFGKVTNYIL MKSTNQAFLE MAYTEAAQAM VQYYQEKS AV INGEKLLIRM SKRYKELQLK KPGKAVAAII QDIHSQRERD MFREADRYGP ERPRSRSPVS RSLSPRSHTP SFTSCSSSHS PPGPSRADWG NGRDSWEHSP YARREEERDP APWRDNGDDK RDRMDPWAHD RKHHPRQLDK
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AELDERPEGG RPHREKYPRS GSPNLPHSVS SYKSREDGYY RKEPKAKSDK YLKQQQDAPG
RSRRKDEARL RESRHPHPDD SGKEDGLGPK VTRAPEGAKA KQNEKNKTKR TDRDQEGADD
RKENTMAENE AGKEEQEGME ESPQSVGRQE KEAEFSDPEN TRTKKEQDWE SESEAEGESW
YPTNMEELVT VDEVGEEEDF IVEPDIPELE EIVPIDQKDK ICPETCLCVT TTLDLDLAQD
FPKEGVKAVG NGAAEISLKS PRELPSASTS CPSDMDVEMP GLNLDAERKP AESETGLSLE
DSDCYEKEAK GVESSDVHPA PTVQQMSSPK PAEERARQPS PFVDDCKTRG TPEDGACEGS
PLEEKASPPI ETDLQNQACQ EVLTPENSRY VEMKSLEVRS PEYTEVELKQ PLSLPSWEPE
DVFSLSIPL GVEFVVPRTG FYCKLGLFY TSEETAKMSH CRSAPHYRNL QKYLSQLAEE
GLKETEGADS PRPEDSGIVP RFERKKL

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	RBM20
Alternative Name:	RBM20 (RBM20 Products)
Background:	RNA-binding protein 20 (RNA-binding motif protein 20),FUNCTION: RNA-binding protein that acts as a regulator of mRNA splicing of a subset of genes encoding key structural proteins involved in cardiac development, such as TTN (Titin), CACNA1C, CAMK2D or PDLIM5/ENH (PubMed:22466703, PubMed:24960161, PubMed:27531932, PubMed:27496873, PubMed:26604136, PubMed:29895960, PubMed:30948719, PubMed:32840935, PubMed:35427468, PubMed:34732726). Acts as a repressor of mRNA splicing: specifically binds the 5'UCUU-3' motif that is predominantly found within intronic sequences of pre-mRNAs, leading to the exclusion of specific exons in target transcripts (PubMed:24960161, PubMed:30948719, PubMed:34732726). RBM20-mediated exon skipping is hormone-dependent and is essential for TTN isoform transition in both cardiac and skeletal muscles (PubMed:27531932, PubMed:30948719). RBM20-mediated exon skipping of TTN provides substrates for the formation of circular RNA (circRNAs) from the TTN transcripts (PubMed:27531932, PubMed:34732726). Together with RBM24, promotes the expression of

Target Details

short isoforms of PDLIM5/ENH in cardiomyocytes (By similarity).
{ECO:0000250|UniProtKB:E9PT37, ECO:0000269|PubMed:22466703,
ECO:0000269|PubMed:24960161, ECO:0000269|PubMed:26604136,
ECO:0000269|PubMed:27496873, ECO:0000269|PubMed:27531932,
ECO:0000269|PubMed:29895960, ECO:0000269|PubMed:30948719,
ECO:0000269|PubMed:32840935, ECO:0000269|PubMed:34732726,
ECO:0000269|PubMed:35427468}.

Molecular Weight: 134.3 kDa

UniProt: [Q5T481](#)

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

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Handling

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process