

Datasheet for ABIN3135080

## RBM20 Protein (AA 1-1199) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	RBM20
Protein Characteristics:	AA 1-1199
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RBM20 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MVLAVAMSQD ADPSGPEQPD RDACVMPGVQ GPSVPQGQQG MQPLPPPPPP QPQASLPQII</p> <p>QNAAKLLDKS PFSVNNQNPL LTSPASVQLA QIQAQLTLHR LKMAQTAVTN NTAAATVLNQ</p> <p>VLSKVAMSQP LFNQLRHPSV LGTAHGPTGV SQHAASVPSA HFPSTAIAFS PPSQTGGPGP</p> <p>SVSLPSQPPN AMVVHTFSGV VPQTPAQPAV ILSLGKAGPT PATTGFYDYG KANSQGAYGS</p> <p>ETEGQPGFLP ASASATASGS MTYEGHYSHT GQDGQPAFSK DFYGPNAQGP HIAGGFADQ</p> <p>TGSMKGDVGG LLQGTNSQWE RPPGFSGQNK PDITAGPSLW APPASQPYEL YDPEEPTSDR</p> <p>APPAFGSRLN NSKQGFQCSK RRTKEGQAVL SVRPLQGHQL NDFRGLAPLH LPHICSICDK</p> <p>KVFDLKDWEH HVKGLHAQK CLLFSESAGL RSIRASGEGT LSASANSTAV YNPTGNEDYT</p> <p>SNLGTSYAAI PTRAFASQNP VFPSASSGTS FAAQRKGAGR VVHCNLPPEG SCTENDVINL</p> <p>GLPFGKVTNY ILMKSTNQAF LEMAYTEAAQ AMVQYYQEKP AIINGEKLLI RMSTRYKELQ</p> <p>LKKPGKNVAA IIQDIHSQRE RDMLREADRY GPERPRSRSP MSRSLSPRSH SPPGPSRADW</p>

NGNRDSYAWR DEDRETVPRR ENGEDKRDRL DVWAHDRKHY PRQLDKAELD ERLEGGGRGYR  
EKYLKSGSPG PLHSVSGYKG REDGYHRKEP KAKLDKYPKQ QPDVPGRSRR KEEARLREPR  
HHPEDSGKA EDLEPKITRA PDGTSKQSE KSKTKRADRD QEGADDDKES QLAENEAGAE  
EQEGMVGIIQ EGTESCDPEN TRTKKGQDCD SGSEPEGDNW YPTNMEELVT VDEVGEEDFI  
MEPDLPELEE IVPIDQDKT LPKICTCVTA TLGLDLAKDF TKQGETLGNG DAELSLKLPG  
QVPSTSASCP NDTDLEMPGL NLDAERKPAE SETGLSLEVS NCYEKEARGE ESDVSLAPA  
VQQMSSPQPA DERARQSSPF LDDCKARGSP EDGSHEASPL EGKASPPTES DLQSACREN  
PRYMEVKSLN VRSPEFTEAE LKEPLSLPSW EPEVFSELSI PLGVEFVVR TGIFYCKLCGL  
FYTSEEAAKV SHCRSTVHYR NLQKYLSQLA EEGLKETEGT DSPSPERGGI GPHLERKKL

**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.**

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### 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:** 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:24584570, PubMed:27630136, PubMed:29650543, PubMed:29895960, PubMed:33110103, PubMed:35394688, PubMed:35041844). 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:32187365). RBM20-mediated exon skipping is hormone-dependent and is essential for TTN isoform transition in both cardiac and skeletal muscles (PubMed:27630136, PubMed:29895960, PubMed:33110103, PubMed:35041844). RBM20-mediated exon skipping of TTN provides substrates for the formation of circular RNA (circRNAs) from the TTN transcripts (PubMed:37272356). Together with RBM24, promotes the expression of short isoforms of PDLIM5/ENH in cardiomyocytes (By similarity). {ECO:0000250|UniProtKB:E9PT37, ECO:0000250|UniProtKB:Q5T481, ECO:0000269|PubMed:22466703, ECO:0000269|PubMed:24584570, ECO:0000269|PubMed:27630136, ECO:0000269|PubMed:29650543, ECO:0000269|PubMed:29895960, ECO:0000269|PubMed:32187365, ECO:0000269|PubMed:33110103, ECO:0000269|PubMed:35041844, ECO:0000269|PubMed:35394688, ECO:0000269|PubMed:37272356}.

**Molecular Weight:** 130.1 kDa

## Target Details

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UniProt: [Q3UQS8](#)

## Application Details

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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

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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