

# Datasheet for ABIN7563743 **RBM20 Protein (AA 1-1199) (His tag)**



### Overview

| Quantity:                     | 1 mg   |
|-------------------------------|--|
| Target:                       | RBM20  |
| Protein Characteristics:      | AA 1-1199                                    |
| Origin:                       | Mouse  |
| Source:                       | HEK-293 Cells                                |
| Protein Type:                 | Recombinant                                  |
| Purification tag / Conjugate: | This RBM20 protein is labelled with His tag. |

#### **Product Details**

| Purpose:  | Custom-made recombinant Rbm20 Protein expressed in mammalian cells. |
|-----------|---|
| Sequence: | MVLAVAMSQD ADPSGPEQPD RDACVMPGVQ GPSVPQGQQG MQPLPPPPPP QPQASLPQII   |
|           | QNAAKLLDKS PFSVNNQNPL LTSPASVQLA QIQAQLTLHR LKMAQTAVTN NTAAATVLNQ   |
|           | VLSKVAMSQP LFNQLRHPSV LGTAHGPTGV SQHAASVPSA HFPSTAIAFS PPSQTGGPGP   |
|           | SVSLPSQPPN AMVVHTFSGV VPQTPAQPAV ILSLGKAGPT PATTGFYDYG KANSGQAYGS   |
|           | ETEGQPGFLP ASASATASGS MTYEGHYSHT GQDGQPAFSK DFYGPNAQGP HIAGGFPADQ   |
|           | TGSMKGDVGG LLQGTNSQWE RPPGFSGQNK PDITAGPSLW APPASQPYEL YDPEEPTSDR   |
|           | APPAFGSRLN NSKQGFGCSC RRTKEGQAVL SVRPLQGHQL NDFRGLAPLH LPHICSICDK   |
|           | KVFDLKDWEL HVKGKLHAQK CLLFSESAGL RSIRASGEGT LSASANSTAV YNPTGNEDYT   |
|           | SNLGTSYAAI PTRAFAQSNP VFPSASSGTS FAAQRKGAGR VVHICNLPEG SCTENDVINL   |
|           | GLPFGKVTNY ILMKSTNQAF LEMAYTEAAQ AMVQYYQEKP AIINGEKLLI RMSTRYKELQ   |
|           | LKKPGKNVAA IIQDIHSQRE RDMLREADRY GPERPRSRSP MSRSLSPRSH SPPGPSRADW   |
|           | GNGRDSYAWR DEDRETVPRR ENGEDKRDRL DVWAHDRKHY PRQLDKAELD ERLEGGRGYR   |

EKYLKSGSPG PLHSVSGYKG REDGYHRKEP KAKLDKYPKQ QPDVPGRSRR KEEARLREPR HPHPEDSGKA EDLEPKITRA PDGTKSKQSE KSKTKRADRD QEGADDKKES QLAENEAGAE EQEGMVGIQQ EGTESCDPEN TRTKKGQDCD SGSEPEGDNW YPTNMEELVT VDEVGEEDFI MEPDLPELEE IVPIDQKDKT LPKICTCVTA TLGLDLAKDF TKQGETLGNG DAELSLKLPG QVPSTSASCP NDTDLEMPGL NLDAERKPAE SETGLSLEVS NCYEKEARGE EDSDVSLAPA VQQMSSPQPA DERARQSSPF LDDCKARGSP EDGSHEASPL EGKASPPTES DLQSQACREN PRYMEVKSLN VRSPEFTEAE LKEPLSLPSW EPEVFSELSI PLGVEFVVPR TGFYCKLCGL FYTSEEAAKV SHCRSTVHYR NLQKYLSQLA EEGLKETEGT DSPSPERGGI GPHLERKKL

Sequence without tag. The proposed Purification-Tag is based on experiences 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.

Specificity:

If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics:

#### Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, 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

UniProt:

Q3UQS8

#### **Application Details**

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

#### Handling

Format:

Buffer:
The buffer composition is at the discretion of the manufacturer.

Handling Advice:
Avoid repeated freeze-thaw cycles.

Storage:
-80 °C

## Handling

| Storage Comment: | Store at -80°C. |
|------------------|-----------------|
| Expiry Date:     | 12 months       |