

# Datasheet for ABIN7555124 **RBM20 Protein (AA 1-1227) (His tag)**



# Overview

Quantity:	1 mg
Target:	RBM20
Protein Characteristics:	AA 1-1227
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RBM20 protein is labelled with His tag.

# **Product Details**

1 Todact Details	
Purpose:	Custom-made recombinant RBM20 Protein expressed in mammalian cells.
Sequence:	MVLAAAMSQD ADPSGPEQPD RVACSVPGAR ASPAPSGPRG MQQPPPPPQP PPPPQAGLPQ
	IIQNAAKLLD KNPFSVSNPN PLLPSPASLQ LAQLQAQLTL HRLKLAQTAV TNNTAAATVL
	NQVLSKVAMS QPLFNQLRHP SVITGPHGHA GVPQHAAAIP 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
	VFDLKDWELH VKGKLHAQKC LVFSENAGIR CILGSAEGTL CASPNSTAVY NPAGNEDYAS
	NLGTSYVPIP ARSFTQSSPT FPLASVGTTF AQRKGAGRVV HICNLPEGSC TENDVINLGL
	PFGKVTNYIL MKSTNQAFLE MAYTEAAQAM VQYYQEKSAV INGEKLLIRM SKRYKELQLK
	KPGKAVAAII QDIHSQRERD MFREADRYGP ERPRSRSPVS RSLSPRSHTP SFTSCSSSHS
	PPGPSRADWG NGRDSWEHSP YARREEERDP APWRDNGDDK RDRMDPWAHD RKHHPRQLDK

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
DVFSELSIPL GVEFVVPRTG FYCKLCGLFY TSEETAKMSH CRSAVHYRNL QKYLSQLAEE
GLKETEGADS PRPEDSGIVP RFERKKL 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: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 hormonedependent 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 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:

05T481

# **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