

Datasheet for ABIN3136083

**Retinoblastoma Binding Protein 8 Protein (RBBP8) (AA 1-893)  
(His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	Retinoblastoma Binding Protein 8 (RBBP8)
Protein Characteristics:	AA 1-893
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Retinoblastoma Binding Protein 8 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	MSISGSGCGS PNSADASNDF KELWTKLKEY HDKEVQGLQV KVTCLKKERI LDAQRLEEFF TKNQQLRDQQ KVLQETIKIL EDRLRAGLCD RCAVTEEHMH KKQQEFENIR QQNLKLITEL MNEKNTLQEE NKKLSEQLQQ KMENGQQDQV AELACEENII PDSPVTSFSF SGINRLRKKE NLHVRVVEQT HTKLERSLCT NELRKISKDS APAPVNSEEH EILVADTCDQ NHSPLSKICE TSSYPDKTS FNLDTVVAET LGLNGQEESE PQGPMSPLGS ELYHCLKEDH KKHPFMESAR SKEDSLRFSD SASKTPPQEF TTRASSPVFG ATSTVKAHLG LNTSFSPSLL DIGKKNLLKT APFSNIAVSR SEKVRSKSED NALFTQHSLG SEVKVISQSF SSKQILTNTK VSDSVDEQCS ADHMNTTVAD KYLVPLKSLG GKASKRKRTE EESEHAVKCP QACFDKENAL PFPMENQFSM NGDHVMDKPL DLSDRFAATQ RQEKNHGNET SKNKLKQATI YEALKPIPKG SSSGRKALSG DCMPAKDSWE TYCLQPRSLQ SSSKFSPDQK TPLQIKEENP VFKTPPCSQE SLETENLFGD VKGTGSLVPT KVKGRAVHGG CELASVLQLN PCRVAKTKAL PSNQDTSFEN IQWSVDPGAD LSQYKMDVTV IDTKDSSHSR LGGETVDMDC TLVSETVLLK MKKQEQKERS PNGDIKMNDS
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LEDMFDRTH EEYESCLADS FSQVPDEEEL PDTTKKTNP ADKQDGVKQK AFVGPYFKDK  
ERETSIQNFP HIEVVRKKEE RRLKGHTCK ECEIYYADLP AEEREKKLAS CSRHRFRYIP  
PNTPENFWEV GFPSTQTCLE RGYIKEDLDL SPRPKRRQPY NAVFSPKGKE QRT

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Rbbp8 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.

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### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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.

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### Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

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### Sterility:

0.22 µm filtered

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## Product Details

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

## Target Details

Target: Retinoblastoma Binding Protein 8 (RBBP8)

Alternative Name: Rbbp8 ([RBBP8 Products](#))

Background: Endonuclease that cooperates with the MRE11-RAD50-NBN (MRN) complex in processing meiotic and mitotic double-strand breaks (DSBs) by ensuring both resection and intrachromosomal association of the broken ends. Functions downstream of the MRN complex and ATM, promotes ATR activation and its recruitment to DSBs in the S/G2 phase facilitating the generation of ssDNA. Component of the BRCA1-RBBP8 complex that regulates CHEK1 activation and controls cell cycle G2/M checkpoints on DNA damage. Promotes microhomology-mediated alternative end joining (A-NHEJ) during class-switch recombination and plays an essential role in chromosomal translocations. {ECO:0000269|PubMed:20829486, ECO:0000269|PubMed:21131978, ECO:0000269|PubMed:21131982}.

Molecular Weight: 101.8 kDa Including tag.

UniProt: [Q80YR6](#)

Pathways: [Cell Division Cycle](#), [DNA Damage Repair](#)

## 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: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

## Handling

Format: Liquid

## Handling

Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
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