



Datasheet for ABIN3137045

## BBS2 Protein (AA 1-721) (His tag)



### 1 Image

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## Overview

Quantity:	1 mg
Target:	BBS2
Protein Characteristics:	AA 1-721
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BBS2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence: MLLPVFTLKL RHKISPRMVA IGRYDGTHPC LAAATQAGKV FIHNPHTRSQ HFSASRWFQS  
PLESDVSLNN INQTVSCLGS GVLNPELGYD TLLVGTQTS defense  
NAIVLGTLGD IAPPLAIIGG NCALQGFDHE GNDFWTVTG DNVHSLALCD FDGDGKTELL  
VGSEDFDIRV FKEDEIVAEM TETEIVTSLC PMYGSRGFYA LSNGTVGVYD KTARYWRIKS  
KNHAMSIHAF DINSDGVCEL ITGWSNGKVD ARSDRTGEVI FKDNFSSAVA GVVEGDYRMD  
GHVQLICCSV DGEIRGYLPG TAEMKGNLLD TSVEQDLIRE LSQKKQNLLL ELRNYEESTK  
AELSSPLNEA DGQKGIIPAN TRLHTALSVN MGNDLQDAHA ELGISTSNDT IIRAVLIFAE  
GIFVGESHVV HPSIHNLSSS LRVPITPPKD VPVDLHLKTF VGYRSSTQFH VFELTRQLPR  
FTMYALTSPD AASEPVSYVN FSVAERTQRM VTWLNQNELL PEDSNVQNSP FHVCFTSLRN  
GGQLYIKMKQ SGEITVNTDD IDLAGDIIQS IASFFAIEDL QVEADFPVYF EELRKVLVKV  
DEYHSVHQKL SADMADNSNL IRSLLVRAED ARLMRDMKTM KSRYMELYDL NKDLLNGYKI  
RCNNHTELLG NLKAVNQAIQ RAGRLRVGKP KNQVISACRD AIRSNNINTL FRIMRVGTAP S

## Product Details

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**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 Bbs2 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.

### 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.

### Purity:

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

### Sterility:

0.22 µm filtered

### Endotoxin Level:

Protein is endotoxin free.

### Grade:

Crystallography grade

## Target Details

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Target:	BBS2
Alternative Name:	<a href="#">Bbs2 (BBS2 Products)</a>
Background:	<p>The BBSome complex is thought to function as a coat complex required for sorting of specific membrane proteins to the primary cilia. The BBSome complex is required for ciliogenesis but is dispensable for centriolar satellite function. This ciliogenic function is mediated in part by the Rab8 GDP/GTP exchange factor, which localizes to the basal body and contacts the BBSome. Rab8(GTP) enters the primary cilium and promotes extension of the ciliary membrane. Firstly the BBSome associates with the ciliary membrane and binds to RAB3IP/Rabin8, the guanosyl exchange factor (GEF) for Rab8 and then the Rab8-GTP localizes to the cilium and promotes docking and fusion of carrier vesicles to the base of the ciliary membrane. The BBSome complex, together with the LTZL1, controls SMO ciliary trafficking and contributes to the sonic hedgehog (SHH) pathway regulation. Required for proper BBSome complex assembly and its ciliary localization (By similarity). {ECO:0000250}.</p>
Molecular Weight:	80.9 kDa Including tag.
UniProt:	<a href="#">Q9CWF6</a>
Pathways:	<a href="#">Hedgehog Signaling</a>

## 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:	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

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Format:	Liquid
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.

## Handling

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Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

## Images

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