

Datasheet for ABIN3089842 **BBS7 Protein (AA 1-715) (Strep Tag)**



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Overview

Quantity:	250 μg
Target:	BBS7
Protein Characteristics:	AA 1-715
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This BBS7 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MDLILNRMDY LQVGVTSQKT MKLIPASRHR ATQKVVIGDH DGVVMCFGMK KGEAAAVFKT
	LPGPKIARLE LGGVINTPQE KIFIAAASEI RGFTKRGKQF LSFETNLTES IKAMHISGSD
	LFLSASYIYN HYCDCKDQHY YLSGDKINDV ICLPVERLSR ITPVLACQDR VLRVLQGSDV
	MYAVEVPGPP TVLALHNGNG GDSGEDLLFG TSDGKLALIQ ITTSKPVRKW EIQNEKKRGG
	ILCIDSFDIV GDGVKDLLVG RDDGMVEVYS FDNANEPVLR FDQMLSESVT SIQGGCVGKD
	SYDEIVVSTY SGWVTGLTTE PIHKESGPGE ELKINQEMQN KISSLRNELE HLQYKVLQER
	ENYQQSSQSS KAKSAVPSFG INDKFTLNKD DASYSLILEV QTAIDNVLIQ SDVPIDLLDV
	DKNSAVVSFS SCDSESNDNF LLATYRCQAD TTRLELKIRS IEGQYGTLQA YVTPRIQPKT
	CQVRQYHIKP LSLHQRTHFI DHDRPMNTLT LTGQFSFAEV HSWVVFCLPE VPEKPPAGEC
	VTFYFQNTFL DTQLESTYRK GEGVFKSDNI STISILKDVL SKEATKRKIN LNISYEINEV
	SVKHTLKLIH PKLEYQLLLA KKVQLIDALK ELQIHEGNTN FLIPEYHCIL EEADHLQEEY

KKQPAHLERL YGMITDLFID KFKFKGTNVK TKVPLLLEIL DSYDQNALIS FFDAA

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.

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 posttranslational 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!

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®).

Product Details	
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made
Target Details	
Target:	BBS7
Alternative Name:	BBS7 (BBS7 Products)
Background:	Bardet-Biedl syndrome 7 protein (BBS2-like protein 1),FUNCTION: 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 carried 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. {ECO:0000269 PubMed:17574030, ECO:0000269 PubMed:22072986}.
Molecular Weight:	80.4 kDa
UniProt:	Q8IWZ6
Pathways:	Hedgehog Signaling
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:	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

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Application Details

	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	
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