Datasheet for ABIN3137611

BUB1B Protein (AA 1-1052) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	BUB1B
Protein Characteristics:	AA 1-1052
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This BUB1B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MAEASEAMCL EGAEWELSKE NIQPLRHGRV MSTLQGALAK QESAGHTALQ QQKRAFESEI RFYSGDDPLD VWDRYINWTE QNYPQGGKES NMSALVERAI EALQGETRYY NDPRFLSLWI KLGHLCNEPL DMYSYLQSQG IGVSLAQFYI SWAEEYEARE NFKKADIIFQ EGIERKAEPL DRLQSQHRQF QSRVSRQAFL ALGNEEEEAL EPSEPQRSSL AELKSRGKKM ARAPISRVGG ALKAPGQSRG FLNAVPQPVH GNRRITVFDE NADTASRTEL SKPVAQPWMA PPVPRAKENE LQPGPWSTDR PAGRRPHDNP ASVTSIPSVL PSFTPYVEES AQQTVMTPCK IEPSINHVLS TRKPGREEGD PLQRVQSHQQ GCEEKKEKMM YCKEKIYAGV GEFSFEEIRA EVFRKKLKER REAELLTSAK KREEMQKQIE EMERRLKAMQ AVQQEGAGGQ QEEKMPTEDP ARLQIASGPQ EMSGVPLSCS ICPLSSNPRE ISPAENILQE QPDSKGSSMP FSIFDESLSD KKDKSPATGG PQVLNAQRRP LSVLKTTEVG TTNEDVSPDI CDELTELEPL SEDAIITGFR NVTLCPNPED TCDFARAARL ASTPFHEILS SKGIAADPEG LLQEEDLDGK AAEAHHTVHH QALIIKKLSP IIEESREATH SSGFSRSSSS APSTSSIKGF QLLEKLELTN DGAEDAIQSP WCSQYRLQLL

KSLLELSAFA EFSVEDRPMP VLEIGKEIEL GPEDYVIKQE HLTCDDYRLF WVAPRSSAEL TMIKASSQPI PWDFYINLKL KERLNEDYDQ LCSCCQYQDG HVVWYQYINC STLQNLLQHS EFVTHEIIVL IIYNLLTIVE KLHRAEIVHG DLSPRSLILR NRIHDPYDYV NKDDHAVRIM DFSYSVDLRV QLDAFAYSGF RTAQILEGQK ILANCSSPYH VDLLGIADLA HLLLFKEHLH VFWDGLLWKL SQSTSELKDS ELWNKFFVRI LNASDKSTVS VLGELAAEMG GAFDATFHSH LNRALWKLGK TISPEALLTQ QDKQPGGSQS PA

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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 post-translational 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.

Product Details

	• The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. • We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	≥ 80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	BUB1B
Alternative Name:	Bub1b (BUB1B Products)
Background:	Mitotic checkpoint serine/threonine-protein kinase BUB1 beta (EC 2.7.11.1) (MAD3/BUB1-related protein kinase) (BubR1) (Mitotic checkpoint kinase MAD3L),FUNCTION: Essential component of the mitotic checkpoint. Required for normal mitosis progression and tumor suppression. The mitotic checkpoint delays anaphase until all chromosomes are properly attached to the mitotic spindle. One of its checkpoint functions is to inhibit the activity of the anaphase-promoting complex/cyclosome (APC/C) by blocking the binding of CDC20 to APC/C, independently of its kinase activity. The other is to monitor kinetochore activities that depend on the kinetochore motor CENPE. Required for kinetochore localization of CENPE. Negatively regulates PLK1 activity in interphase cells and suppresses centrosome amplification. Also implicated in triggering apoptosis in polyploid cells that exit aberrantly from mitotic arrest. Essential for tumor suppression. May play a role in regulating aging and fertility (By similarity). {ECO:0000250, ECO:0000269|PubMed:14744753, ECO:0000269|PubMed:15208629}.
Molecular Weight:	118.4 kDa
UniProt:	Q9Z1S0

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 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!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)