

Datasheet for ABIN7562221  
**BUB1 Protein (AA 1-1058) (His tag)**



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## Overview

Quantity:	1 mg
Target:	BUB1
Protein Characteristics:	AA 1-1058
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BUB1 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant Bub1 Protein expressed in mammalian cells.
Sequence:	<p>MDNLENVFRM FEAHMQSYTG NDPLGEWESF IKWVEENFPD NKEYLMTLLE HLMKEFLHKK</p> <p>NYHNDSRFIN YCLKFAEYNS DRHQFFFLY NQGIGTKSSY IYMSWAGHLE AQGELQHASA</p> <p>IFQTGIHNEA EPKELLQQQY RLFQARLTGI HLPAAQTTSSE PLHSAQILNQ VMMTNSSPEK</p> <p>NSACVPKSQG SECSGVASST CDEKSNMEQR VIMISKSECS VSSSVAPKPE AQQVMYCKEK</p> <p>LIRGDSEFSF EELRAQKYNQ RKKHEQWVSE DRNYMKRKEA NAFEEQLLKQ KMDLHKKLH</p> <p>QVVELSHKDL PASENRPDVS LVCVGQNTCS QQELRGPSLS SISHQTSESS GEKPQEPPSV</p> <p>PLMVNAVNST LLFPAANLPA LPVPVSGQSL TDSRCVNQSV HEFMPQCGPE TKEVCETNKV</p> <p>ASINDFHHTT NTSLGMVQGT PCKVQPSPTV HTKEALGFIM DMFQAPTLPD ISDDKDEWPS</p> <p>LDQNEDAFEAF QFQKNAVSSG DWGVKKIMTL SSAFFIFEDG NKENYGLPQP KNKPLGARTF</p> <p>GERLSKYSS RSNEMPHTDE FMDDSTVCGI RCNKTLPASP KSIGDFTSAA QLSSTPFHKF</p> <p>PADLVQIPED KENVVATQYT HMALDSCKEN IVDLSKGRKL GPIQEKISAS LPCPSQPATG</p> <p>GLFTQEAVFG LEAFKCTGID HATVEDLSDA NAGLQVECVQ TLGNVNAPSF TVENPWDDDEL</p>

## Product Details

ILKLLSGLSK PVTSYSNTFE WQSKLPAIKT KTEYQLGSLL VYVNHLLGEG AFAQVF EAIH  
GDVRNAKSEQ KCILKVQRPA NSWEFYIGMQ LMERLKPEVH HMFIFYSAH LFKNGSILVG  
ELYSYGTLLN VINLYKNTSE KVMPQALVLT FAIRMLYMVE QVHSCEIHG DIKPDNFILG  
HRFLEQADED LATGLALIDL GQSIDMKLFP KGTVFTGKCE TSGFQCPEML SNKPWNYQID  
YFGVAATIYC MLFGSYMVKV NEGGVWKPEG LFRRLPHLDM WEEFFHIMLN IPDCHNLPSL  
DFLRQNMKKL LEQQYSNLIK TLRNRLIVML SEYKRSRK **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:** BUB1

**Alternative Name:** Bub1 ([BUB1 Products](#))

**Background:** Mitotic checkpoint serine/threonine-protein kinase BUB1 (mBUB1) (EC 2.7.11.1) (BUB1A),FUNCTION: Serine/threonine-protein kinase that performs 2 crucial functions during

Target Details

mitosis: it is essential for spindle-assembly checkpoint signaling and for correct chromosome alignment. Has a key role in the assembly of checkpoint proteins at the kinetochore, being required for the subsequent localization of CENPF, BUB1B, CENPE and MAD2L1. Required for the kinetochore localization of PLK1. Required for centromeric enrichment of AUKRB in prometaphase. Plays an important role in defining SGO1 localization and thereby affects sister chromatid cohesion. Promotes the centromeric localization of TOP2A (By similarity). Acts as a substrate for anaphase-promoting complex or cyclosome (APC/C) in complex with its activator CDH1 (APC/C-Cdh1). Necessary for ensuring proper chromosome segregation and binding to BUB3 is essential for this function. Can regulate chromosome segregation in a kinetochore-independent manner. Can phosphorylate BUB3. The BUB1-BUB3 complex plays a role in the inhibition of APC/C when spindle-assembly checkpoint is activated and inhibits the ubiquitin ligase activity of APC/C by phosphorylating its activator CDC20. This complex can also phosphorylate MAD1L1. Kinase activity is essential for inhibition of APC/CCDC20 and for chromosome alignment but does not play a major role in the spindle-assembly checkpoint activity. Mediates cell death in response to chromosome missegregation and acts to suppress spontaneous tumorigenesis. Essential during early and later stages of embryonic development. Necessary for postimplantation embryogenesis and proliferation of primary embryonic fibroblasts and plays an important role in spermatogenesis and fertility.

{ECO:0000250|UniProtKB:O43683, ECO:0000269|PubMed:17925231, ECO:0000269|PubMed:17938250, ECO:0000269|PubMed:19772675}.

Molecular Weight: 119.6 kDa

UniProt: [O08901](#)

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: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Handling

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Storage Comment:	Store at -80°C.
Expiry Date:	12 months