Datasheet for ABIN7552819

BUB1 Protein (AA 1-1085) (His tag)

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Overview

Quantity:	1 mg
Target:	BUB1
Protein Characteristics:	AA 1-1085
Origin:	Human
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:	MDTPENVLQM LEAHMQSYKG NDPLGEWERY IQWVEENFPE NKEYLITLLE HLMKEFLDKK KYHNDPRFIS YCLKFAEYNS DLHQFFEFLY NHGIGTLSSP LYIAWAGHLE AQGELQHASA VLQRGIQNQA EPREFLQQQY RLFQTRLTET HLPAQARTSE PLHNVQVLNQ MITSKSNPGN NMACISKNQG SELSGVISSA CDKESNMERR VITISKSEYS VHSSLASKVD VEQVVMYCKE KLIRGESEFS FEELRAQKYN QRRKHEQWVN EDRHYMKRKE ANAFEEQLLK QKMDELHKKL HQVVETSHED LPASQERSEV NPARMGPSVG SQQELRAPCL PVTYQQTPVN MEKNPREAPP VVPPLANAIS AALVSPATSQ SIAPPVPLKA QTVTDSMFAV ASKDAGCVNK STHEFKPQSG AEIKEGCETH KVANTSSFHT TPNTSLGMVQ ATPSKVQPSP TVHTKEALGF IMNMFQAPTL PDISDDKDEW QSLDQNEDAF EAQFQKNVRS SGAWGVNKII SSLSSAFHVF EDGNKENYGL PQPKNKPTGA RTFGERSVSR LPSKPKEEVP HAEEFLDDST VWGIRCNKTL APSPKSPGDF TSAAQLASTP FHKLPVESVH ILEDKENVVA KQCTQATLDS CEENMVVPSR DGKFSPIQEK SPKQALSSHM YSASLLRLSQ PAAGGVLTCE AELGVEACRL TDTDAAIAED PPDAIAGLQA

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	EWMQMSSLGT VDAPNFIVGN PWDDKLIFKL LSGLSKPVSS YPNTFEWQCK LPAIKPKTEF QLGSKLVYVH HLLGEGAFAQ VYEATQGDLN DAKNKQKFVL KVQKPANPWE FYIGTQLMER LKPSMQHMFM KFYSAHLFQN GSVLVGELYS YGTLLNAINL YKNTPEKVMP QGLVISFAMR MLYMIEQVHD CEIIHGDIKP DNFILGNGFL EQDDEDDLSA GLALIDLGQS IDMKLFPKGT IFTAKCETSG FQCVEMLSNK PWNYQIDYFG VAATVYCMLF GTYMKVKNEG GECKPEGLFR RLPHLDMWNE FFHVMLNIPD CHHLPSLDLL RQKLKKVFQQ HYTNKIRALR NRLIVLLLEC KRSRK **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 (hBUB1) (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 (PubMed:35044816). 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. {ECO:0000269|PubMed:10198256, ECO:0000269|PubMed:15020684, ECO:0000269|PubMed:15525512, ECO:0000269|PubMed:15723797, ECO:0000269|PubMed:16760428, ECO:0000269|PubMed:17158872, ECO:0000269|PubMed:19487456, ECO:0000269|PubMed:20739936, ECO:0000269|PubMed:35044816}.
Molecular Weight:	122.4 kDa
UniProt:	O43683

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

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