Datasheet for ABIN7554100

DNA Helicase B Protein (HELB) (AA 1-1087) (His tag)

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Overview

Quantity:	1 mg
Target:	DNA Helicase B (HELB)
Protein Characteristics:	AA 1-1087
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DNA Helicase B protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant HELB Protein expressed in mammalian cells.
Sequence:	MARSSPYLRQ LQGPLLPPRD LVEEDDDYLN DDVEEDEESV FIDAEELCSG GVKAGSLPGC LRVSICDENT QETCKVFGRF PITGAWWRVK VQVKPVVGSR SYQYQVQGFP SYFLQSDMSP PNQKHICALF LKECEVSSDD VNKFLTWVKE VSNYKNLNFE NLRETLRTFH KETGRKDQKQ PTQNGQEELF LDNEMSLPLE NTIPFRNVMT ALQFPKIMEF LPVLLPRHFK WIIGSGSKEM LKEIEEILGT HPWKLGFSKI TYREWKLLRC EASWIAFCQC ESLLQLMTDL EKNALIMYSR LKQICREDGH TYVEVNDLTL TLSNHMSFHA ASESLKFLKD IGVVTYEKSC VFPYDLYHAE RAIAFSICDL MKKPPWHLCV DVEKVLASIH TTKPENSSDD ALNESKPDEV RLENPVDVVD TQDNGDHIWT NGENEINAEI SEVQLDQDQV EVPLDRDQVA ALEMICSNPV TVISGKGGCG KTTIVSRLFK HIEQLEEREV KKACEDFEQD QNASEEWITF TEQSQLEADK AIEVLLTAPT GKAAGLLRQK TGLHAYTLCQ VNYSFYSWTQ TMMTTNKPWK FSSVRVLVVD EGSLVSVGIF KSVLNLLCEH SKLSKLIILG DIRQLPSIEP GNLLKDLFET LKSRNCAIEL KTNHRAESQL IVDNATRISR RQFPKFDAEL NISDNPTLPI SIQDKTFIFV RLPEEDASSQ SSKTNHHSCL

Product Details

	YSAVKTLLQE NNLQNAKTSQ FIAFRRQDCD LINDCCCKHY TGHLTKDHQS RLVFGIGDKI CCTRNAYLSD LLPENISGSQ QNNDLDASSE DFSGTLPDFA KNKRDFESNV RLCNGEIFFI TNDVTDVTFG KRRSLTINNM AGLEVTVDFK KLMKYCRIKH AWARTIHTFQ GSEEQTVVYV VGKAGRQHWQ HVYTAVTRGR CRVYVIAEES QLRNAIMKNS FPRKTRLKHF LQSKLSSSGA PPADFPSPRK SSGDSGGPST PSASPLPVVT DHAMTNDVTW SEASSPDERT LTFAERWQLS SPDGVDTDDD LPKSRASKRT CGVNDDESPS KIFMVGESPQ VSSRLQNLRL NNLIPRQLFK PTDNQET **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:	DNA Helicase B (HELB)
Alternative Name:	HELB (HELB Products)
Background:	DNA helicase B (hDHB) (EC 3.6.4.12),FUNCTION: 5'-3' DNA helicase involved in DNA damage response by acting as an inhibitor of DNA end resection (PubMed:25617833,

Target Details

	PubMed:26774285). Recruitment to single-stranded DNA (ssDNA) following DNA damage leads to inhibit the nucleases catalyzing resection, such as EXO1, BLM and DNA2, possibly via the 5'-3' ssDNA translocase activity of HELB (PubMed:26774285). As cells approach S phase, DNA end resection is promoted by the nuclear export of HELB following phosphorylation (PubMed:26774285). Acts independently of TP53BP1 (PubMed:26774285). Unwinds duplex DNA with 5'-3' polarity. Has single-strand DNA-dependent ATPase and DNA helicase activities. Prefers ATP and dATP as substrates (PubMed:12181327). During S phase, may facilitate cellular recovery from replication stress (PubMed:22194613). {ECO:0000269|PubMed:12181327, ECO:0000269|PubMed:22194613, ECO:0000269|PubMed:25617833, ECO:0000269|PubMed:26774285}.
Molecular Weight:	123.3 kDa
UniProt:	Q8NG08

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