Datasheet for ABIN7554083

HEL308 Protein (AA 1-1101) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	HEL308
Protein Characteristics:	AA 1-1101
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HEL308 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant HELQ Protein expressed in mammalian cells.
Sequence:	MDECGSRIRR RVSLPKRNRP SLGCIFGAPT AAELVPGDEG KEEEEMVAEN RRRKTAGVLP VEVQPLLLSD SPECLVLGGG DTNPDLLRHM PTDRGVGDQP NDSEVDMFGD YDSFTENSFI AQVDDLEQKY MQLPEHKKHA TDFATENLCS ESIKNKLSIT TIGNLTELQT DKHTENQSGY EGVTIEPGAD LLYDVPSSQA IYFENLQNSS NDLGDHSMKE RDWKSSSHNT VNEELPHNCI EQPQQNDESS SKVRTSSDMN RRKSIKDHLK NAMTGNAKAQ TPIFSRSKQL KDTLLSEEIN VAKKTVESSS NDLGPFYSLP SKVRDLYAQF KGIEKLYEWQ HTCLTLNSVQ ERKNLIYSLP TSGGKTLVAE ILMLQELLCC RKDVLMILPY VAIVQEKISG LSSFGIELGF FVEEYAGSKG RFPPTKRREK KSLYIATIEK GHSLVNSLIE TGRIDSLGLV VVDELHMIGE GSRGATLEMT LAKILYTSKT TQIIGMSATL NNVEDLQKFL QAEYYTSQFR PVELKEYLKI NDTIYEVDSK AENGMTFSRL LNYKYSDTLK KMDPDHLVAL VTEVIPNYSC LVFCPSKKNC ENVAEMICKF LSKEYLKHKE KEKCEVIKNL KNIGNGNLCP VLKRTIPFGV AYHHSGLTSD ERKLLEEAYS TGVLCLFTCT STLAAGVNLP ARRVILRAPY VAKEFLKRNQ YKQMIGRAGR AGIDTIGESI

Product Details

	LILQEKDKQQ VLELITKPLE NCYSHLVQEF TKGIQTLFLS LIGLKIATNL DDIYHFMNGT FFGVQQKVLL KEKSLWEITV ESLRYLTEKG LLQKDTIYKS EEEVQYNFHI TKLGRASFKG TIDLAYCDIL YRDLKKGLEG LVLESLLHLI YLTTPYDLVS QCNPDWMIYF RQFSQLSPAE QNVAAILGVS ESFIGKKASG QAIGKKVDKN VVNRLYLSFV LYTLLKETNI WTVSEKFNMP RGYIQNLLTG TASFSSCVLH FCEELEEFWV YRALLVELTK KLTYCVKAEL IPLMEVTGVL EGRAKQLYSA GYKSLMHLAN ANPEVLVRTI DHLSRRQAKQ IVSSAKMLLH EKAEALQEEV EELLRLPSDF PGAVASSTDK A **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:	HEL308
Alternative Name:	HELQ (HEL308 Products)
Background:	Helicase POLQ-like (EC 3.6.4.12) (Mus308-like helicase) (POLQ-like helicase),FUNCTION: Single-stranded 3'-5' DNA helicase that plays a key role in homology-driven double-strand break (DSB)

Target Details

	repair (PubMed:11751861, PubMed:19995904, PubMed:21398521, PubMed:24005041, PubMed:24005565, PubMed:34316696, PubMed:34937945). Involved in different DSB repair mechanisms that are guided by annealing of extensive stretches of complementary bases at break ends, such as microhomology-mediated end-joining (MMEJ), single-strand annealing (SSA) or synthesis-dependent strand annealing (SDSA) (PubMed:34937945). Possesses both DNA unwinding and annealing activities (PubMed:34937945). Forms a complex with RAD51, stimulating HELQ DNA helicase activity and ability to unwing DNA (PubMed:34937945). Efficiently unwinds substrates containing 3' overhangs or a D-loop (PubMed:21398521, PubMed:34937945). In contrast, interaction with the replication protein A (RPA/RP-A) complex inhibits DNA unwinding by HELQ but strongly stimulates DNA strand annealing (PubMed:34937945). Triggers displacement of RPA from single-stranded DNA to facilitate annealing of complementary sequences (PubMed:34316696, PubMed:34937945). {ECO:0000269|PubMed:11751861, ECO:0000269|PubMed:19995904, ECO:0000269|PubMed:21398521, ECO:0000269|PubMed:24005041, ECO:0000269|PubMed:24005565, ECO:0000269|PubMed:34316696, ECO:0000269|PubMed:34937945}.
Molecular Weight:	124.1 kDa
UniProt:	Q8TDG4

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