

# Datasheet for ABIN7563655 **HEL308 Protein (AA 1-1069) (His tag)**



## Overview

Quantity:	1 mg
Target:	HEL308
Protein Characteristics:	AA 1-1069
Origin:	Mouse
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:	MEDGCPRIRR RVSVRKRNRG NLENLRASPT PAELQPAEDT EDEAAAGSRR RKTGSPEHAQ
	ENDSEEDMFG DYDSFTESSF LAHVDDLEQR YMQLPECGDR DADSGTKDLC SAGLKNNLRV
	TTVINLTDPE TSEHGQKQSH LDVPAEPEPG SDLSFDVPSS QILYFENPQN SPEALGDPCT
	KKTNGDPQKS SHEELVSSHT EQPEPNNDFS NVRAASESSR RKSLKDHLKS TMAGNARAQT
	PAFPRSKHLR EALLSEEISV AKKAIESPSD DLGPFYSLPS KVRDLYVQLK GIKKLYDWQH
	TCLTLRSVQE RKNLIYSLPT SGGKTLVAEI LMLQELLCRQ KDVLMILPYV AIVQEKISSL
	SSFGIELGFF VEEYAGSKGR FPPIKRREKK SLYIATIEKA HSLVNALIET SRLSTLGLVV
	VDELHMIGEG SRGAILEMTL AKVLYTSKTT QIIGMSATLN NVEDLQAFLK AEYYTSQFRP
	VELKEFLKVN DTIYEVDSQA ADGMTFSRLL SYKYSEALKK MDPDRLVALV TEVIPNYSCL
	VFCPSKKNCE NVAEMLCKFL SKDYLNHREK EKCEVIKSLR NIGNGKVCPV LKRTVPFGIA
	YHHSGLTSEE RKLLEEAYST GVLCLLTCTS TLAAGVNLPA RRVILRAPYV ANTFLKRNQY
	KQMVGRAGRA GIDTAGESIL LLQEKDKQQV LELISGPLET CCSHLVEEFT KGIQALFLSL

IGLKIAASLG DIYQFMSGTF FGVQQKILLK EKSLWEITVD ALEHLTEKGL LQKDSCGDNE
GLECHFRITK LGQASFKGAI DLAYCDTLYR DLKKGLEGLV LESLLHLIYL TTPYDLAAQS
EPDWMVYFKQ FGQLSPTEQN VAALLGVSES FIGKKAAGQA VRKKVDKNVV NRLYLSFVLY
SLLKETNVWS VSEKFNLPRG YIQNLLMGAA SFSSCVLHFC EELEEFWVYK ALLVELTKKL
TYCVKAELIP LMEVTGVLEG RAKQLYNAGY RSIMHLANAN PEVLVKTIDH LSRRQARQIV
SSAKMLLHEK AEALQGEAEE LLRLPADLPG LGGPSSERAG SHAGDVTLS Sequence without tag.
The proposed Purification-Tag is based on experiences with the expression system a

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)

repair (PubMed:24005329, PubMed:24005041). 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) (By similarity). Possesses both DNA unwinding and annealing activities (By similarity). Forms a complex with RAD51, stimulating HELQ DNA helicase activity and ability to unwing DNA (By similarity). Efficiently unwinds substrates containing 3' overhangs or a D-loop (By similarity). In contrast, interaction with the replication protein A (RPA/RP-A) complex inhibits DNA unwinding by HELQ but strongly stimulates DNA strand annealing (By similarity). Triggers displacement of RPA from single-stranded DNA to facilitate annealing of complementary sequences (By similarity). {ECO:0000250|UniProtKB:Q8TDG4, ECO:0000269|PubMed:24005041,

ECO:0000269|PubMed:24005329}.

Molecular Weight:

119.1 kDa

UniProt:

Q2VPA6

# **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