Datasheet for ABIN3134951

HEL308 Protein (AA 1-1069) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	HEL308
Protein Characteristics:	AA 1-1069
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HEL308 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
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 Strep-Tag is based on experience s 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.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.

Product Details

- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, 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:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Application Details

Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months