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Datasheet for ABIN3092069
DDX42 Protein (AA 1-938) (Strep Tag)

Overview

Quantity:	1 mg
Target:	DDX42
Protein Characteristics:	AA 1-938
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DDX42 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MNWNKGGPGT KRGFGGGFA ISAGKKEEPK LPQQSHSAFG ATSSSSGFGK SAPPQLPSFY
KIGSKRANFD EENAYFEDEE EDSSNVDPY IPAENSPTRQ QFHSPVSD SDDDPLEAFM
AEVEDQAARD MKRLEEKDK E RKNVKGIRDD IEEEDQEAY FRYMAENPTA GVVQEEEEEN
LEYSDGNPI APTKKIIDPL PPIDHSEIDY PPFKNFYNE HEEITNLTPQ QLIDLRHKLN
LRVSGAAPPR PGSSFAHFGF DEQLMHQIRK SEYTQPTPIQ CQGV PVALSG RDMIGIAKTG
SGKTAAFIWP MLIHIMDQKE LEPGDGPIAV IVCPTRELCQ QIHAECKRFG KAYNLRSVAV
YGGGSMWEQA KALQEGAEIV VCTPGLIDH VKKKATNLQR VSYLVFDEAD RMFDMGFEYQ
VRSIASHVRP DRQTLIFSAT FRKKIEKLAR DILIDPIRVV QGDIGEANED VTQIVEILHS
GPSKWNWLTR RLVEFTSSGS VLLFVTKKAN AEELANNLKQ EGHNLGLLHG DMDQSERNKV
ISDFKKKDIP VLVATDVAAR GLDIPSITV INYDVARDID THTHRIGRTG RAGEKGVAYT
LLTPKDSNFA GDLVRNLEGA NQHVSKELLD LAMQNAWFRK SRFKGGKGGK LNIGGGGLGY
RERPGLGSEN MDRGNNNVMS NYEAYKPSTG AMGDRLTAMK AAFQSQYKSH FVAASLSNQK

AGSSAAGASG WTSAGSLNSV PTNSAQQGHN SPDSPVTSAA KGIPFGNTG NISGAPVTYP
SAGAQGVNNT ASGNNREGT GGSNGKRERY TENRGSSRHS HGETGNRHSD SPRHGDGGRH
GDGYRHPSS SRHTDGHRHG ENRHGGSAGR HGENRGANDG RNGESRKEAF NRESKMEPKM
EPKVDSKMD KVDSKTDKTA DGFVPEPPK RKKSRWDS

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

Product Details

- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	DDX42
Alternative Name:	DDX42 (DDX42 Products)
Background:	<p>ATP-dependent RNA helicase DDX42 (EC 3.6.4.13) (DEAD box protein 42) (RNA helicase-like protein) (RHELP) (RNA helicase-related protein) (RNAHP) (SF3b DEAD box protein) (Splicing factor 3B-associated 125 kDa protein) (SF3b125),FUNCTION: ATP-dependent RNA helicase that binds to partially double-stranded RNAs (dsRNAs) in order to unwind RNA secondary structures (PubMed:16397294). Unwinding is promoted in the presence of single-strand binding proteins (PubMed:16397294). Mediates also RNA duplex formation thereby displacing the single-strand RNA binding protein (PubMed:16397294). ATP and ADP modulate its activity: ATP binding and hydrolysis by DDX42 triggers RNA strand separation, whereas the ADP-bound form of the protein triggers annealing of complementary RNA strands (PubMed:16397294). Required for assembly of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs: DDX42 associates transiently with the SF3B subcomplex of the 17S U2 SnRNP complex and is released after fulfilling its role in the assembly of 17S U2 SnRNP (PubMed:12234937, PubMed:36797247). Involved in the survival of cells by interacting with TP53BP2 and thereby counteracting the apoptosis-stimulating activity of TP53BP2 (PubMed:19377511). Relocalizes TP53BP2 to the cytoplasm (PubMed:19377511). {ECO:0000269 PubMed:12234937, ECO:0000269 PubMed:16397294, ECO:0000269 PubMed:19377511, ECO:0000269 PubMed:36797247}.</p>
Molecular Weight:	103.0 kDa

Target Details

UniProt: [Q86XP3](#)

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.

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. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)