

# Datasheet for ABIN7553633 **DDX42 Protein (AA 1-938) (His tag)**



## Overview

Quantity:	1 mg
Target:	DDX42
Protein Characteristics:	AA 1-938
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DDX42 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Purpose:	Custom-made recombinat DDX42 Protein expressed in mammalien cells.
Sequence:	MNWNKGGPGT KRGFGFGGFA ISAGKKEEPK LPQQSHSAFG ATSSSSGFGK SAPPQLPSFY
	KIGSKRANFD EENAYFEDEE EDSSNVDLPY IPAENSPTRQ QFHSKPVDSD SDDDPLEAFM
	AEVEDQAARD MKRLEEKDKE RKNVKGIRDD IEEEDDQEAY FRYMAENPTA GVVQEEEEDN
	LEYDSDGNPI APTKKIIDPL PPIDHSEIDY PPFEKNFYNE HEEITNLTPQ QLIDLRHKLN
	LRVSGAAPPR PGSSFAHFGF DEQLMHQIRK SEYTQPTPIQ CQGVPVALSG RDMIGIAKTG
	SGKTAAFIWP MLIHIMDQKE LEPGDGPIAV IVCPTRELCQ QIHAECKRFG KAYNLRSVAV
	YGGGSMWEQA KALQEGAEIV VCTPGRLIDH VKKKATNLQR VSYLVFDEAD RMFDMGFEYQ
	VRSIASHVRP DRQTLLFSAT FRKKIEKLAR DILIDPIRVV QGDIGEANED VTQIVEILHS
	GPSKWNWLTR RLVEFTSSGS VLLFVTKKAN AEELANNLKQ EGHNLGLLHG DMDQSERNKV
	ISDFKKKDIP VLVATDVAAR GLDIPSIKTV INYDVARDID THTHRIGRTG RAGEKGVAYT
	LLTPKDSNFA GDLVRNLEGA NQHVSKELLD LAMQNAWFRK SRFKGGKGKK LNIGGGGLGY

RERPGLGSEN MDRGNNNVMS NYEAYKPSTG AMGDRLTAMK AAFQSQYKSH FVAASLSNQK AGSSAAGASG WTSAGSLNSV PTNSAQQGHN SPDSPVTSAA KGIPGFGNTG NISGAPVTYP SAGAQGVNNT ASGNNSREGT GGSNGKRERY TENRGSSRHS HGETGNRHSD SPRHGDGGRH GDGYRHPESS SRHTDGHRHG ENRHGGSAGR HGENRGANDG RNGESRKEAF NRESKMEPKM EPKVDSSKMD KVDSKTDKTA DGFAVPEPPK RKKSRWDS 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.

#### Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien 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, Western Blot

#### Grade:

Target:

custom-made

DDX42

## **Target Details**

Alternative Name:	DDX42 (DDX42 Products)
Background:	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:16397294, ECO:0000269|PubMed:19377511, ECO:0000269|PubMed:36797247}.

Molecular Weight:

103.0 kDa

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.

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