

# Datasheet for ABIN7553639 DDX17 Protein (AA 1-729) (His tag)



## Overview

Quantity:	1 mg	
Target:	DDX17	
Protein Characteristics:	AA 1-729	
Origin:	Human	
Source:	HEK-293 Cells	
Protein Type:	Recombinant	
Purification tag / Conjugate:	This DDX17 protein is labelled with His tag.	
Application:	Western Blotting (WB), SDS-PAGE (SDS)	

Purpose:	Custom-made recombinat DDX17 Protein expressed in mammalien cells.
Sequence:	MPTGFVAPIL CVLLPSPTRE AATVASATGD SASERESAAP AAAPTAEAPP PSVVTRPEPQ
	ALPSPAIRAP LPDLYPFGTM RGGGFGDRDR DRDRGGFGAR GGGGLPPKKF GNPGERLRKK
	KWDLSELPKF EKNFYVEHPE VARLTPYEVD ELRRKKEITV RGGDVCPKPV FAFHHANFPQ
	YVMDVLMDQH FTEPTPIQCQ GFPLALSGRD MVGIAQTGSG KTLAYLLPAI VHINHQPYLE
	RGDGPICLVL APTRELAQQV QQVADDYGKC SRLKSTCIYG GAPKGPQIRD LERGVEICIA
	TPGRLIDFLE SGKTNLRRCT YLVLDEADRM LDMGFEPQIR KIVDQIRPDR QTLMWSATWP
	KEVRQLAEDF LRDYTQINVG NLELSANHNI LQIVDVCMES EKDHKLIQLM EEIMAEKENK
	TIIFVETKRR CDDLTRRMRR DGWPAMCIHG DKSQPERDWV LNEFRSGKAP ILIATDVASR
	GLDVEDVKFV INYDYPNSSE DYVHRIGRTA RSTNKGTAYT FFTPGNLKQA RELIKVLEEA
	NQAINPKLMQ LVDHRGGGGG GGGRSRYRTT SSANNPNLMY QDECDRRLRG VKDGGRRDSA
	SYRDRSETDR AGYANGSGYG SPNSAFGAQA GQYTYGQGTY GAAAYGTSSY TAQEYGAGTY

GASSTTSTGR SSQSSSQQFS GIGRSGQQPQ PLMSQQFAQP PGATNMIGYM GQTAYQYPPP PPPPPSRK 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:

custom-made

# **Target Details**

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DDX17

#### Alternative Name:

DDX17 (DDX17 Products)

### Background:

Probable ATP-dependent RNA helicase DDX17 (EC 3.6.4.13) (DEAD box protein 17) (DEAD box protein p72) (DEAD box protein p82) (RNA-dependent helicase p72),FUNCTION: As an RNA helicase, unwinds RNA and alters RNA structures through ATP binding and hydrolysis. Involved in multiple cellular processes, including pre-mRNA splicing, alternative splicing, ribosomal RNA processing and miRNA processing, as well as transcription regulation. Regulates the alternative splicing of exons exhibiting specific features (PubMed:12138182, PubMed:23022728, PubMed:24910439, PubMed:22266867). For instance, promotes the inclusion of AC-rich alternative exons in CD44 transcripts (PubMed:12138182). This function requires the RNA helicase activity (PubMed:12138182, PubMed:23022728, PubMed:24910439,

PubMed:22266867). Affects NFAT5 and histone macro-H2A.1/MACROH2A1 alternative splicing in a CDK9-dependent manner (PubMed:26209609, PubMed:22266867). In NFAT5, promotes the introduction of alternative exon 4, which contains 2 stop codons and may target NFAT5 exon 4-containing transcripts to nonsense-mediated mRNA decay, leading to the downregulation of NFAT5 protein (PubMed:22266867). Affects splicing of mediators of steroid hormone signaling pathway, including kinases that phosphorylates ESR1, such as CDK2, MAPK1 and GSK3B, and transcriptional regulators, such as CREBBP, MED1, NCOR1 and NCOR2. By affecting GSK3B splicing, participates in ESR1 and AR stabilization (PubMed:24275493). In myoblasts and epithelial cells, cooperates with HNRNPH1 to control the splicing of specific subsets of exons (PubMed:24910439). In addition to binding mature mRNAs, also interacts with certain pri-microRNAs, including MIR663/miR-663a, MIR99B/miR-99b, and MIR6087/miR-6087 (PubMed:25126784). Binds pri-microRNAs on the 3' segment flanking the stem loop via the 5'-[ACG]CAUC[ACU]-3' consensus sequence (PubMed:24581491). Required for the production of subsets of microRNAs, including MIR21 and MIR125B1 (PubMed:24581491, PubMed:27478153). May be involved not only in microRNA primary transcript processing, but also stabilization (By similarity). Participates in MYC down-regulation at high cell density through the production of MYC-targeting microRNAs (PubMed:24581491). Along with DDX5, may be involved in the processing of the 32S intermediate into the mature 28S ribosomal RNA (PubMed:17485482). Promoter-specific transcription regulator, functioning as a coactivator or corepressor depending on the context of the promoter and the transcriptional complex in which it exists (PubMed:15298701). Enhances NFAT5 transcriptional activity (PubMed:22266867). Synergizes with TP53 in the activation of the MDM2 promoter, this activity requires acetylation on lysine residues (PubMed:17226766, PubMed:20663877, PubMed:19995069). May also coactivate MDM2 transcription through a TP53-independent pathway (PubMed:17226766). Coactivates MMP7 transcription (PubMed:17226766). Along with CTNNB1, coactivates MYC, JUN, FOSL1 and cyclin D1/CCND1 transcription (PubMed:17699760). Alone or in combination with DDX5 and/or SRA1 non-coding RNA, plays a critical role in promoting the assembly of proteins required for the formation of the transcription initiation complex and chromatin remodeling leading to coactivation of MYOD1-dependent transcription. This helicase-independent activity is required for skeletal muscle cells to properly differentiate into myotubes (PubMed:17011493, PubMed:24910439). During epithelial-tomesenchymal transition, coregulates SMAD-dependent transcriptional activity, directly controlling key effectors of differentiation, including miRNAs which in turn directly repress its expression (PubMed:24910439). Plays a role in estrogen and testosterone signaling pathway at several levels. Mediates the use of alternative promoters in estrogen-responsive genes and regulates transcription and splicing of a large number of steroid hormone target genes

Buffer:

Handling Advice:

	(PubMed:24275493, PubMed:20406972, PubMed:20663877, PubMed:19995069). Contrary to
	splicing regulation activity, transcriptional coregulation of the estrogen receptor ESR1 is
	helicase-independent (PubMed:19718048, PubMed:24275493). Plays a role in innate immunity.
	Specifically restricts bunyavirus infection, including Rift Valley fever virus (RVFV) or La Crosse
	virus (LACV), but not vesicular stomatitis virus (VSV), in an interferon- and DROSHA-
	independent manner (PubMed:25126784). Binds to RVFV RNA, likely via structured viral RNA
	elements (PubMed:25126784). Promotes mRNA degradation mediated by the antiviral zinc-
	finger protein ZC3HAV1, in an ATPase-dependent manner (PubMed:18334637).
	{ECO:0000250 UniProtKB:Q501J6, ECO:0000269 PubMed:12138182,
	ECO:0000269 PubMed:15298701, ECO:0000269 PubMed:17011493,
	ECO:0000269 PubMed:17226766, ECO:0000269 PubMed:17485482,
	ECO:0000269 PubMed:17699760, ECO:0000269 PubMed:18334637,
	ECO:0000269 PubMed:19718048, ECO:0000269 PubMed:19995069,
	ECO:0000269 PubMed:20406972, ECO:0000269 PubMed:20663877,
	ECO:0000269 PubMed:22266867, ECO:0000269 PubMed:23022728,
	ECO:0000269 PubMed:24275493, ECO:0000269 PubMed:24581491,
	ECO:0000269 PubMed:24910439, ECO:0000269 PubMed:25126784,
	ECO:0000269 PubMed:26209609, ECO:0000269 PubMed:27478153, ECO:0000305}.
Molecular Weight:	ECO:0000269 PubMed:26209609, ECO:0000269 PubMed:27478153, ECO:0000305}.  80.3 kDa
Molecular Weight: UniProt:	•
	80.3 kDa
UniProt:	80.3 kDa Q92841
UniProt:	80.3 kDa  Q92841  Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid
UniProt:	80.3 kDa  Q92841  Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid
UniProt: Pathways:	80.3 kDa  Q92841  Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid
UniProt:  Pathways:  Application Details	80.3 kDa  Q92841  Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Muscle Cell Differentiation
UniProt:  Pathways:  Application Details	80.3 kDa  Q92841  Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Muscle Cell Differentiation  In addition to the applications listed above we expect the protein to work for functional studies
UniProt:  Pathways:  Application Details	80.3 kDa  Q92841  Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Muscle Cell Differentiation  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
UniProt:  Pathways:  Application Details  Application Notes:	80.3 kDa  Q92841  Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Muscle Cell Differentiation  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.
UniProt:  Pathways:  Application Details  Application Notes:  Restrictions:	80.3 kDa  Q92841  Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Muscle Cell Differentiation  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.

The buffer composition is at the discretion of the manufacturer.

Avoid repeated freeze-thaw cycles.

# Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months