Datasheet for ABIN7553662

DDX1 Protein (AA 1-740) (His tag)

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Overview

Quantity:	1 mg
Target:	DDX1
Protein Characteristics:	AA 1-740
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DDX1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant DDX1 Protein expressed in mammalian cells.
Sequence:	MAAFSEMGVM PEIAQAVEEM DWLLPTDIQA ESIPLILGGG DVLMAAETGS GKTGAFSIPV IQIVYETLKD QQEGKKGKTT IKTGASVLNK WQMNPYDRGS AFAIGSDGLC CQSREVKEWH GCRATKGLMK GKHYYEVSCH DQGLCRVGWS TMQASLDLGT DKFGFGFGGT GKKSHNKQFD NYGEEFTMHD TIGCYLDIDK GHVKFSKNGK DLGLAFEIPP HMKNQALFPA CVLKNAELKF NFGEEEFKFP PKDGFVALSK APDGYIVKSQ HSGNAQVTQT KFLPNAPKAL IVEPSRELAE QTLNNIKQFK KYIDNPKLRE LLIIGGVAAR DQLSVLENGV DIVVGTPGRL DDLVSTGKLN LSQVRFLVLD EADGLLSQGY SDFINRMHNQ IPQVTSDGKR LQVIVCSATL HSFDVKKLSE KIMHFPTWVD LKGEDSVPDT VHHVVVPVNP KTDRLWERLG KSHIRTDDVH AKDNTRPGAN SPEMWSEAIK ILKGEYAVRA IKEHKMDQAI IFCRTKIDCD NLEQYFIQQG GGPDKKGHQF SCVCLHGDRK PHERKQNLER FKKGDVRFLI CTDVAARGID IHGVPYVINV TLPDEKQNYV HRIGRVGRAE RMGLAISLVA TEKEKVWYHV CSSRGKGCYN TRLKEDGGCT IWYNEMQLLS EIEEHLNCTI SQVEPDIKVP VDEFDGKVTY GQKRAAGGGS YKGHVDILAP TVQELAALEK

Product Details

	EAQTSFLHLG YLPNQLFRTF **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.**
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:	DDX1
Alternative Name:	DDX1 (DDX1 Products)
Background:	ATP-dependent RNA helicase DDX1 (EC 3.6.4.13) (DEAD box protein 1) (DEAD box protein retinoblastoma) (DBP-RB),FUNCTION: Acts as an ATP-dependent RNA helicase, able to unwind both RNA-RNA and RNA-DNA duplexes. Possesses 5' single-stranded RNA overhang nuclease activity. Possesses ATPase activity on various RNA, but not DNA polynucleotides. May play a role in RNA clearance at DNA double-strand breaks (DSBs), thereby facilitating the template-guided repair of transcriptionally active regions of the genome. Together with RELA, acts as a coactivator to enhance NF-kappa-B-mediated transcriptional activation. Acts as a positive transcriptional regulator of cyclin CCND2 expression. Binds to the cyclin CCND2 promoter

Target Details

	region. Associates with chromatin at the NF-kappa-B promoter region via association with RELA. Binds to poly(A) RNA. May be involved in 3'-end cleavage and polyadenylation of pre-mRNAs. Component of the tRNA-splicing ligase complex required to facilitate the enzymatic turnover of catalytic subunit RTCB: together with archease (ZBTB8OS), acts by facilitating the guanylylation of RTCB, a key intermediate step in tRNA ligation (PubMed:24870230). Component of a multi-helicase-TICAM1 complex that acts as a cytoplasmic sensor of viral double-stranded RNA (dsRNA) and plays a role in the activation of a cascade of antiviral responses including the induction of pro-inflammatory cytokines via the adapter molecule TICAM1. Specifically binds (via helicase ATP-binding domain) on both short and long poly(I:C) dsRNA (By similarity). {ECO:0000250|UniProtKB:Q91VR5, ECO:0000269|PubMed:12183465, ECO:0000269|PubMed:15567440, ECO:0000269|PubMed:18335541, ECO:0000269|PubMed:18710941, ECO:0000269|PubMed:20573827, ECO:0000269|PubMed:24870230}., FUNCTION: (Microbial infection) Required for HIV-1 Rev function as well as for HIV-1 and coronavirus IBV replication. Binds to the RRE sequence of HIV-1 mRNAs. {ECO:0000269|PubMed:15567440}., FUNCTION: (Microbial infection) Required for Coronavirus IBV replication. {ECO:0000269|PubMed:20573827}.
Molecular Weight:	82.4 kDa
UniProt:	Q92499
Pathways:	Ribonucleoprotein Complex Subunit Organization

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