

Datasheet for ABIN7564786 **DDX1 Protein (AA 1-740) (His tag)**



Overview

| Quantity: | 1 mg |
|-------------------------------|---|
| Target: | DDX1 |
| Protein Characteristics: | AA 1-740 |
| Origin: | Mouse |
| 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 |
| | GCRGTRGLLK GKHYYEVSCH DQGLCRVGWS TMQASLDLGT DKFGFGFGGT GKKSHNKQFD |
| | NYGEEFTMHD TIGCYLDIDK GHVKFSKNGK DLGLAFEIPA HIKNQALFPA CVLKNAELKF |
| | NFGEEEFKFP PKDGFVALSK APDNYIVKSQ HTGNAQVSQT KFLPNAPKAL IVEPSRELAE |
| | QTLNNVKQFK KYIDNPKLRE LLIIGGVAAR DQLSVLDNGV DIVVGTPGRL DDLVSTGKLN |
| | LSQVRFLVLD EADGLLSQGY SDFINRMHNQ IPQITCDGKR LQVIVCSATL HSFDVKKLSE |
| | KIMHFPTWVD LKGEDSVPDT VHHVVVPVNP KTDKLWERLG KNHIRTDDVH AKDNTRPGAN |
| | SPEMWSEAIK ILKGEYAVRA IKEHKMDQAI IFCRTKIDCD NLEQYFMQQG GGPDKKGHQF |
| | SCVCLHGDRK PHERKQNLER FKKGDVRFLI CTDVAARGID IHGVPYVINV TLPDEKQNYV |
| | HRIGRVGRAE RMGLAISLVA TEKEKVWYHV CSNRGKGCYN TRLKEDGGCT IWYNEMQLLS |
| | EIEEHLNCTI SQVEPDIKVP VDEFDGKVTY GQKRAAGGGN YKGHVDVLAP TVQELAALEK |

| | 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),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 (By similarity). Acts as a positive transcriptional regulator o |
| | cyclin CCND2 expression (PubMed:19398953). Binds to the cyclin CCND2 promoter region |

(PubMed:19398953). 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 (By similarity). 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 (PubMed:21703541). Specifically binds (via helicase ATP-binding domain) on both short and long poly(I:C) dsRNA (PubMed:21703541). {ECO:0000250|UniProtKB:Q92499, ECO:0000269|PubMed:19398953, ECO:0000269|PubMed:21703541}.

Molecular Weight: 82.5 kDa

UniProt: Q91VR5

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