Datasheet for ABIN3078827

DDX56 Protein (AA 1-547) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	DDX56
Protein Characteristics:	AA 1-547
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DDX56 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MEDSEALGFE HMGLDPRLLQ AVTDLGWSRP TLIQEKAIPL ALEGKDLLAR ARTGSGKTAA YAIPMLQLLL HRKATGPVVE QAVRGLVLVP TKELARQAQS MIQQLATYCA RDVRVANVSA AEDSVSQRAV LMEKPDVVVG TPSRILSHLQ QDSLKLRDSL ELLVVDEADL LFSFGFEEEL KSLLCHLPRI YQAFLMSATF NEDVQALKEL ILHNPVTLKL QESQLPGPDQ LQQFQVVCET EEDKFLLLYA LLKLSLIRGK SLLFVNTLER SYRLRLFLEQ FSIPTCVLNG ELPLRSRCHI ISQFNQGFYD CVIATDAEVL GAPVKGKRRG RGPKGDKASD PEAGVARGID FHHVSAVLNF DLPPTPEAYI HRAGRTARAN NPGIVLTFVL PTEQFHLGKI EELLSGENRG PILLPYQFRM EEIEGFRYRC RDAMRSVTKQ AIREARLKEI KEELLHSEKL KTYFEDNPRD LQLLRHDLPL HPAVVKPHLG HVPDYLVPPA LRGLVRPHKK RKKLSSSCRK AKRAKSQNPL RSFKHKGKKF RPTAKPS
	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 in one-step affinity chromatography • 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 try to ensure that you receive soluble 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 against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	DDX56
Alternative Name:	DDX56 (DDX56 Products)
Background:	Probable ATP-dependent RNA helicase DDX56 (EC 3.6.4.13) (ATP-dependent 61 kDa nucleolar RNA helicase) (DEAD box protein 21) (DEAD box protein 56),FUNCTION: Nucleolar RNA helicase that plays a role in various biological processes including innate immunity, ribosome biogenesis or nucleolus organization (PubMed:31340999, PubMed:33789112). Plays an essential role in maintaining nucleolar integrity in planarian stem cells (PubMed:33789112). Maintains embryonic stem cells proliferation by conventional regulation of ribosome assembly and interaction with OCT4 and POU5F1 complex (By similarity). Regulates antiviral innate immunity by inhibiting the virus-triggered signaling nuclear translocation of IRF3 (PubMed:31340999). Mechanistically, acts by disrupting the interaction between IRF3 and importin IPO5 (PubMed:31340999). May play a role in later stages of the processing of the pre-ribosomal particles leading to mature 60S ribosomal subunits. Has intrinsic ATPase activity. {ECO:0000250|UniProtKB:Q9D0R4, ECO:0000269|PubMed:31340999, ECO:0000269|PubMed:33789112}., FUNCTION: (Microbial infection) Helicase activity is important for packaging viral RNA into virions during West Nile virus infection. {ECO:0000269|PubMed:22925334}., FUNCTION: (Microbial infection) Plays a positive role in foot-and-mouth disease virus replication by inhibiting the phosphorylation of IRF3 leading to inhibition of type I interferon. {ECO:0000269|PubMed:31445188}., FUNCTION: (Microbial infection) Plays a positive role in EMCV replication by interrupting IRF3 phosphorylation and its nucleus translocation. {ECO:0000269|PubMed:34922148}.
Molecular Weight:	61.6 kDa
UniProt:	Q9NY93

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

Application Details

	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. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months