Datasheet for ABIN3135418

DDX4 Protein (AA 1-702) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	DDX4
Protein Characteristics:	AA 1-702
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DDX4 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MGDEDWEAEI LKPHVSSYVP VFEKDKYSSG ANGDTFNRTS ASSDIGESSK KENTSTTGGF GRGKGFGNRG FLNNKFEEGD SSGFWKESNN DCEDNQTRSR GFSKRGGCQD GNDSEASGPF RRGGRGSFRG CRGGFGLGRP NSESDQDQGT QRGGGLFGSR KPAASDSGNG DTYQSRSGSG RGGYKGLNEE VVTGSGKNSW KSETEGGESS DSQGPKVTYI PPPPPEDEDS IFAHYQTGIN FDKYDTILVE VSGHDAPPAI LTFEEANLCQ TLNNNIAKAG YTKLTPVQKY SIPIVLAGRD LMACAQTGSG KTAAFLLPIL AHMMRDGITA SRFKELQEPE CIIVAPTREL INQIYLEARK FSFGTCVRAV VIYGGTQFGH SVRQIVQGCN ILCATPGRLM DIIGKEKIGL KQVKYLVLDE ADRMLDMGFG PEMKKLISCP GMPSKEQRQT LLFSATFPEE IQRLAGDFLK SSYLFVAVGQ VGGACRDVQQ TILQVGQYSK REKLVEILRN IGDERTMVFV ETKKKADFIA TFLCQEKIST TSIHGDREQR EREQALGDFR CGKCPVLVAT SVAARGLDIE NVQHVINFDL PSTIDEYVHR IGRTGRCGNT GRAISFFDTD SDNHLAQPLV KVLSDAQQDV PAWLEEIAFS TYVPPSFSSS

	TRGGAVFASV DTRKNYQGKH TLNTAGISSS QAPNPVDDES WD **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®).

Product Details

Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	DDX4
Alternative Name:	Ddx4 (DDX4 Products)
Background:	ATP-dependent RNA helicase DDX4 (EC 3.6.4.13) (DEAD box protein 4) (Mvh) (Vasa homolog),FUNCTION: ATP-dependent RNA helicase required during spermatogenesis to repress transposable elements and preventing their mobilization, which is essential for the germline integrity (PubMed:20439430, PubMed:28633017). Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons (PubMed:20439430, PubMed:28633017). Involved in the secondary piRNAs metabolic process, the production of piRNAs in fetal male germ cells through a ping-pong amplification cycle (PubMed:20439430, PubMed:28633017). Required for PIWIL2 slicing-triggered piRNA biogenesis: helicase activity enables utilization of one of the slice cleavage fragments generated by PIWIL2 and processing these pre-piRNAs into piRNAs (PubMed:28633017). {ECO:0000269|PubMed:20439430, ECO:0000269|PubMed:28633017}.
Molecular Weight:	76.5 kDa
UniProt:	Q61496

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 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

Application Details

	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