Datasheet for ABIN3093866

MOV10 Protein (AA 1-1003) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	MOV10
Protein Characteristics:	AA 1-1003
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MOV10 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MPSKFSCRQL REAGQCFESF LVVRGLDMET DRERLRTIYN RDFKISFGTP APGFSSMLYG MKIANLAYVT KTRVRFFRLD RWADVRFPEK RRMKLGSDIS KHHKSLLAKI FYDRAEYLHG KHGVDVEVQG PHEARDGQLL IRLDLNRKEV LTLRLRNGGT QSVTLTHLFP LCRTPQFAFY NEDQELPCPL GPGECYELHV HCKTSFVGYF PATVLWELLG PGESGSEGAG TFYIARFLAA VAHSPLAAQL KPMTPFKRTR ITGNPVVTNR IEEGERPDRA KGYDLELSMA LGTYYPPPRL RQLLPMLLQG TSIFTAPKEI AEIKAQLETA LKWRNYEVKL RLLLHLEELQ MEHDIRHYDL ESVPMTWDPV DQNPRLLTLE VPGVTESRPS VLRGDHLFAL LSSETHQEDP ITYKGFVHKV ELDRVKLSFS MSLLSRFVDG LTFKVNFTFN RQPLRVQHRA LELTGRWLLW PMLFPVAPRD VPLLPSDVKL KLYDRSLESN PEQLQAMRHI VTGTTRPAPY IIFGPPGTGK TVTLVEAIKQ VVKHLPKAHI LACAPSNSGA DLLCQRLRVH LPSSIYRLLA PSRDIRMVPE DIKPCCNWDA KKGEYVFPAK KKLQEYRVLI TTLITAGRLV SAQFPIDHFT HIFIDEAGHC MEPESLVAIA GLMEVKETGD PGGQLVLAGD PRQLGPVLRS PLTQKHGLGY SLLERLLTYN SLYKKGPDGY

DPQFITKLLR NYRSHPTILD IPNQLYYEGE LQACADVVDR ERFCRWAGLP RQGFPIIFHG VMGKDEREGN SPSFFNPEEA ATVTSYLKLL LAPSSKKGKA RLSPRSVGVI SPYRKQVEKI RYCITKLDRE LRGLDDIKDL KVGSVEEFQG QERSVILIST VRSSQSFVQL DLDFNLGFLK NPKRFNVAVT RAKALLIIVG NPLLLGHDPD WKVFLEFCKE NGGYTGCPFP AKLDLQQGQN LLQGLSKLSP STSGPHSHDY LPQEREGEGG LSLQVEPEWR NEL

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its

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	specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	MOV10
Alternative Name:	MOV10 (MOV10 Products)
Background:	Helicase MOV-10 (EC 3.6.4.13) (Armitage homolog) (Moloney leukemia virus 10 protein),FUNCTION: 5' to 3' RNA helicase that is involved in a number of cellular roles ranging from mRNA metabolism and translation, modulation of viral infectivity, inhibition of retrotransposition, or regulation of synaptic transmission (PubMed:23093941). Plays an important role in innate antiviral immunity by promoting type I interferon production (PubMed:27016603, PubMed:35157734, PubMed:27974568). Mechanistically, specifically uses IKKepsilon/IKBKE as the mediator kinase for IRF3 activation (PubMed:27016603, PubMed:35157734). Blocks HIV-1 virus replication at a post-entry step (PubMed:20215113). Counteracts HIV-1 Vif-mediated degradation of APOBEC3G through its helicase activity by interfering with the ubiquitin-proteasome pathway (PubMed:29258557). Inhibits also hepatitis B virus/HBV replication by interacting with HBV RNA and thereby inhibiting the early step of viral reverse transcription (PubMed:31722967). Contributes to UPF1 mRNA target degradation by translocation along 3' UTRs (PubMed:24726324). Required for microRNA (miRNA)-mediated gene silencing by the RNA-induced silencing complex (RISC). Required for both miRNA-mediated translational repression and miRNA-mediated cleavage of complementary mRNAs by RISC (PubMed:16289642, PubMed:17507929, PubMed:22791714). In cooperation with FMR1, regulates miRNA-mediated translational repression by AGO2 (PubMed:25464849). Restricts retrotransposition of long interspersed element-1 (LINE-1) in cooperation with TUT4 and TUT7

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	counteracting the RNA chaperonne activity of L1RE1 (PubMed:30122351, PubMed:23093941). Facilitates LINE-1 uridylation by TUT4 and TUT7 (PubMed:30122351). Required for embryonic viability and for normal central nervous system development and function. Plays two critical roles in early brain development: suppresses retroelements in the nucleus by directly inhibiting cDNA synthesis, while regulates cytoskeletal mRNAs to influence neurite outgrowth in the cytosol (By similarity). May function as a messenger ribonucleoprotein (mRNP) clearance factor (PubMed:24726324). {ECO:0000250|UniProtKB:P23249, ECO:0000269|PubMed:16289642, ECO:0000269|PubMed:17507929, ECO:0000269|PubMed:20215113, ECO:0000269|PubMed:22791714, ECO:0000269|PubMed:23093941, ECO:0000269|PubMed:24726324, ECO:0000269|PubMed:25464849, ECO:0000269|PubMed:27016603, ECO:0000269|PubMed:27974568, ECO:0000269|PubMed:29258557, ECO:0000269|PubMed:30122351, ECO:0000269|PubMed:31722967, ECO:0000269|PubMed:35157734}., FUNCTION: (Microbial infection) Required for RNA-directed transcription and replication of the human hepatitis delta virus (HDV). Interacts with small capped HDV RNAs derived from genomic hairpin structures that mark the initiation sites of RNA-dependent HDV RNA transcription. {ECO:0000269|PubMed:18552826}.
Molecular Weight:	113.7 kDa
UniProt:	Q9HCE1
Pathways:	Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, SARS-CoV-2 Protein Interactome

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

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	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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)