Datasheet for ABIN3135325

PML Protein (AA 1-885) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	PML
Protein Characteristics:	AA 1-885
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PML protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	METEPVSVQK VPAPPGSPCR QQDSALTPTP TMPPPEEPSE DYEHSQSPAE QAIQEEFQFL RCPSCQAQAK CPKLLPCLHT LCSGCLEAPG LQCPICKAPG QADANGEALD NVFFESLQRR LAVFRQIVDA QAACTRCKGL ADFWCFECEQ LICSKCFEAH QWYLKHEARP LADLRDNSVS SFLDSTRKSN IFCSNTNHRN PALTDIYCRG CAKPLCCTCA LLDRNHSHLH CDIGEEIQQW HEELGTMTQT LEEQGRTFDS AHAQMCSAIG QLDHARADIE KQIRARVRQV VDYVQAQERE LLEAVNDRYQ RDYQEIAGQL SCLEAVLQRI RTSGALVKRM KLYASDQEVL DMHSFLRKAL CSLRQEEPQN QKVQLLTRGF EEFKLCLQDF ISCITQRINA AVASPEAASN QPEAASTHPV TTSTPEDLEQ PKEVQSVQAQ ALELSKTQPV AMVKTVPGAH PVPVYAFSMQ GPTYREEASQ TVGSMKRKCS HEDCSRKIIK MESTEENEDR LATSSPEQSW PSTFKATSPP HLDGTSNPES TVPEKKILLP NNNHVTSDTG ETEERVVVIS SSEDSDTENL SSHELDDSSS ESSSLQLEGP NSLKALDESL AEPHLEDRTL VFFDLKIDNE TQKISQLAAV NRESKFRVLI QPEAFSVYSK

AVSLEAGLRH FLSFLTTMHR PILACSRLWG PGLPIFFQTL SDINKLWEFQ DTISGFLAVL PLIRERIPGA SSFKLGNLAK TYLARNMSER SALASVLAMR DLCCLLEISP GLPLAQHIYS FSSLQCFASL QPLIQASVLP QSEARLLALH NVSFVELLNA YRTNRQEGLK KYVHYLSLQT TPLSSSASTQ VAQFLQALST HMEGLLEGHA PAGAEGKAES KGCLA

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.

Product Details

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:	PML
Alternative Name:	Pml (PML Products)
Background:	Protein PML,FUNCTION: Functions via its association with PML-nuclear bodies (PML-NBs) in a wide range of important cellular processes, including tumor suppression, transcriptional regulation, apoptosis, senescence, DNA damage response, and viral defense mechanisms. Acts as the scaffold of PML-NBs allowing other proteins to shuttle in and out, a process which is regulated by SUMO-mediated modifications and interactions. Inhibits EIF4E-mediated mRNA nuclear export by reducing EIF4E affinity for the 5' 7-methylguanosine (m7G) cap of target mRNAs (By similarity). Positively regulates p53/TP53 by acting at different levels (by promoting its acetylation and phosphorylation and by inhibiting its MDM2-dependent degradation). Regulates phosphorylation of ITPR3 and plays a role in the regulation of calcium homeostasis at the endoplasmic reticulum. Regulates RB1 phosphorylation and activity. Acts as both a negative regulator of PPARGC1A acetylation and a potent activator of PPAR signaling and fatty acid oxidation. Regulates translation of HIF1A by sequestering MTOR, and thereby plays a role in neoangiogenesis and tumor vascularization. Regulates PER2 nuclear localization and circadian function. Cytoplasmic PML is involved in the regulation of the TGF-beta signaling pathway. Required for normal development of the brain cortex during embryogenesis. Plays a role in granulopoiesis or monopoiesis of myeloid progenitor cells. May play a role regulating stem and progenitor cell fate in tissues as diverse as blood, brain and breast. Shows antiviral activity towards lymphocytic choriomeningitis virus (LCMV) and the vesicular stomatitis virus (VSV). {ECO:0000250|UniProtKB:P29590, ECO:0000269|PubMed:10637504, ECO:0000269|PubMed:11907221, ECO:0000269|PubMed:12439746, ECO:0000269|PubMed:14976551, ECO:0000269|PubMed:15195100, ECO:0000269|PubMed:15356634, ECO:0000269|PubMed:16915281, ECO:0000269|PubMed:19136970, ECO:0000269|PubMed:21030605, ECO:0000269|PubMed:21427174, ECO:0000269|PubMed:21779477, ECO:0000269|PubMed:22274616, ECO:0000269|PubMed:22886304, ECO:0000269|PubMed:23279884, ECO:0000269|PubMed:9488655,

Target Details

	ECO:0000269|PubMed:9806545}.
Molecular Weight:	98.2 kDa
UniProt:	Q60953
Pathways:	p53 Signaling, Retinoic Acid Receptor Signaling Pathway, Maintenance of Protein Location, Positive Regulation of Endopeptidase Activity, Protein targeting to Nucleus

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 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