Datasheet for ABIN3094770

PRDM1 Protein (AA 1-825) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	PRDM1
Protein Characteristics:	AA 1-825
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRDM1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:	MLDICLEKRV GTTLAAPKCN SSTVRFQGLA EGTKGTMKMD MEDADMTLWT EAEFEEKCTY IVNDHPWDSG ADGGTSVQAE ASLPRNLLFK YATNSEEVIG VMSKEYIPKG TRFGPLIGEI YTNDTVPKNA NRKYFWRIYS RGELHHFIDG FNEEKSNWMR YVNPAHSPRE QNLAACQNGM NIYFYTIKPI PANQELLVWY CRDFAERLHY PYPGELTMMN LTQTQSSLKQ PSTEKNELCP KNVPKREYSV KEILKLDSNP SKGKDLYRSN ISPLTSEKDL DDFRRRGSPE MPFYPRVVYP IRAPLPEDFL KASLAYGIER PTYITRSPIP SSTTPSPSAR SSPDQSLKSS SPHSSPGNTV SPVGPGSQEH RDSYAYLNAS YGTEGLGSYP GYAPLPHLPP AFIPSYNAHY PKFLLPPYGM NCNGLSAVSS MNGINNFGLF PRLCPVYSNL LGGGSLPHPM LNPTSLPSSL PSDGARRLLQ PEHPREVLVP APHSAFSFTG AAASMKDKAC SPTSGSPTAG TAATAEHVVQ PKATSAAMAA PSSDEAMNLI KNKRNMTGYK TLPYPLKKQN GKIKYECNVC AKTFGQLSNL KVHLRVHSGE RPFKCQTCNK GFTQLAHLQK HYLVHTGEKP HECQVCHKRF SSTSNLKTHL RLHSGEKPYQ CKVCPAKFTQ FVHLKLHKRL HTRERPHKCS QCHKNYIHLC SLKVHLKGNC AAAPAPGLPL

EDLTRINEEI EKFDISDNAD RLEDVEDDIS VISVVEKEIL AVVRKEKEET GLKVSLQRNM GNGLLSSGCS LYESSDLPLM KLPPSNPLPL VPVKVKQETV EPMDP

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 specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

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)
Grade:	Crystallography grade

Target Details

Target:	PRDM1
Alternative Name:	PRDM1 (PRDM1 Products)
Background:	PR domain zinc finger protein 1 (EC 2.1.1.-) (BLIMP-1) (Beta-interferon gene positive regulatory domain I-binding factor) (PR domain-containing protein 1) (Positive regulatory domain I-binding factor 1) (PRDI-BF1) (PRDI-binding factor 1),FUNCTION: Transcription factor that mediates a transcriptional program in various innate and adaptive immune tissue-resident lymphocyte T cell types such as tissue-resident memory T (Trm), natural killer (trNK) and natural killer T (NKT) cells and negatively regulates gene expression of proteins that promote the egress of tissue-resident T-cell populations from non-lymphoid organs. Plays a role in the development, retention and long-term establishment of adaptive and innate tissue-resident lymphocyte T cell types in non-lymphoid organs, such as the skin and gut, but also in other nonbarrier tissues like liver and kidney, and therefore may provide immediate immunological protection against reactivating infections or viral reinfection (By similarity). Binds specifically to the PRDI element in the promoter of the beta-interferon gene (PubMed:1851123). Drives the maturation of B-lymphocytes into Ig secreting cells (PubMed:12626569). Associates with the transcriptional repressor ZNF683 to chromatin at gene promoter regions (By similarity). Binds to the promoter and acts as a transcriptional repressor of IRF8, thereby promotes transcription of osteoclast differentiation factors such as NFATC1 and EEIG1 (By similarity). {ECO:0000250|UniProtKB:Q60636, ECO:0000269|PubMed:12626569, ECO:0000269|PubMed:1851123}.
Molecular Weight:	91.8 kDa

Target Details

UniProt:	O75626
Pathways:	Regulation of Muscle Cell Differentiation

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. 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)

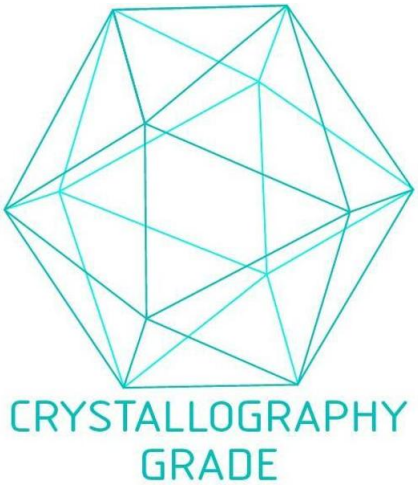

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process

