

### Datasheet for ABIN3122687

# PRDM1 Protein (AA 1-856) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	PRDM1
Protein Characteristics:	AA 1-856
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRDM1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MREAYLRCWI FSWKNVWVRP CQRLHFKTVL LQGSLLYTAL DSYSTVQAAP KSSSGSVKFQ
	GLAETGIMKM DMEDADMTLW TEAEFEEKCT YIVNDHPWDS GADGGTSVQA EASLPRNLLF
	KYAANNSKEV IGVVSKEYIP KGTRFGPLIG EVYTNDTVPK NANRKYFWRI YSREEFHHFI
	DGFNEEKSNW MRYVNPAHSA REQNLAACQN GMNIYFYTIK PIPANQELLV WYCRDFAERL
	HYPYPGELTV INLTQTESNP KQYSSEKNEL YPKSVPKREY SVKEILKLDS NPSKRKDIYR
	SNISPFTLEK DMDGFRKNGS PDMPFYPRVV YPIRAPLPED FLKASLAYGM ERPTYITHSP
	LPSSTTPSPP ASSSPEQSLK SSSPHSSPGN TVSPLAPGLP EHRDSYSYLN VSYGSEGLGS
	YPGYAPAPHL PPAFIPSYNA HYPKFLLPPY GISSNGLSTM NNINGINNFS LFPRLYPVYS
	NLLSGSSLPH PMLNPASLPS SLPTDGARRL LPPEHPKEVL IPAPHSAFSL TGAAASMKDE
	SSPPSGSPTA GTAATSEHVV QPKATSSVMA APSTDGAMNL IKNKRNMTGY KTLPYPLKKQ
	NGKIKYECNV CAKTFGQLSN LKVHLRVHSG ERPFKCQTCN KGFTQLAHLQ KHYLVHTGEK

PHECQVCHKR FSSTSNLKTH LRLHSGEKPY QCKVCPAKFT QFVHLKLHKR LHTRERPHKC AQCHKSYIHL CSLKVHLKGN CPAGPAAGLP LEDLTRINEE IERFDISDNA DRLEDMEDSV DVTSMVEKEI LAVVRKEKEE TSLKVSLQRN MGNGLLSSGC SLYESSDLSL MKLPHSNPLP LVPVKVKQET VEPMDP

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 posttranslational 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: PRDM1 Alternative Name: Prdm1 (PRDM1 Products) Background: PR domain zinc finger protein 1 (EC 2.1.1.-) (B lymphocyte-induced maturation protein 1) (Blimp-1) (Beta-interferon gene positive regulatory domain I-binding factor) (PR domaincontaining protein 1), FUNCTION: Transcription factor that mediates a transcriptional program in various innate and adaptive immune tissue-resident lymphocyte T cell types such as tissueresident 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 (PubMed:27102484). 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 (PubMed:27102484). Binds specifically to the PRDI element in the promoter of the beta-interferon gene (By similarity). Drives the maturation of Blymphocytes into Ig secreting cells (By similarity). Associates with the transcriptional repressor ZNF683 to chromatin at gene promoter regions (PubMed:27102484). Binds to the promoter and acts as a transcriptional repressor of IRF8, thereby promotes transcription of osteoclast differentiation factors such as NFATC1 and EEIG1 (PubMed:32741026). {ECO:0000250|UniProtKB:075626, ECO:0000269|PubMed:27102484, ECO:0000269|PubMed:32741026}.

Molecular Weight: 95.8 kDa
UniProt: Q60636

# 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

## **Application Details**

	as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
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	modifications.
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	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