

Datasheet for ABIN3094786

**PRDM16 Protein (AA 1-1276) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	PRDM16
Protein Characteristics:	AA 1-1276
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRDM16 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Crystallization (Crys), ELISA, Western Blotting (WB)

## Product Details

Sequence:	MRSKARARKL AKSDGDVVNN MYEPNRDLLA SHSAEDEAED SAMSPIVGP PSPFPTSEDF TPKEGSPYEA PVYIPEDIPI PADFELRESS IPGAGLGVWA KRKMEAGERL GPCVVVPRAA AKETDFGWEQ ILTDVEVSPQ EGCITKISED LGSEKFCVDA NQAGAGSWLK YIRVACSCDD QNLTMQISE QIYYKVIKDI EPGEELLVHV KEGVYPLGTV PPGLDEEPTF RCDECDELFG SKLDLRRHKK YTCGSVGAAL YEGLAEELKP EGLGGGSGQA HECKDCERMF PNKYSLEQHM VIHTEEREYK CDQCPKAFNW KSNLIRHQMS HDSGKRFECE NCVKVFTDPS NLQRHIRSQH VGARAHACPD CGKTFATSSG LKQHKHIHST VKPFICEVCH KSYTQFSNLC RHKRMHADCR TQIKCKDCGQ MFSTTSSLNK HRRFCEGKNH YTPGGIFAPG LPLTPSPMMD KAKPSPSLNH ASLGFNEYFP SRPHPGSLPF STAPPTFPAL TPGFPGIFPP SLYPRPPLLPT SLLKSLPN HTQDAKLPS LGNPALPLVS AVSNSSQGTT AAAGPEEKFE SRLEDSCVEK LKTRSSDMSD GSDFEDVNTT TGTDLDTTGT TGSDLSDSDVD SDPDKDKGKG KSAEGQPKFG GGLAPPGAPN SVAEVPVFYS QHSFFPPPDE QLLTATGAAG DSIKAIASIA EKYFGPGFMG MQEKKLGLSLP
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YHSAFPFQFL PNFPHSLYPF TDRALAHNLL VKAEPKSPRD ALKVGGPSAE CPFDLTTPKP  
DVKPILMPK GPSAPASGEE QPLDLSIGSR ARASQNGGGR EPRKNHVYGE RKLGAEGELP  
QVCPARMPQQ PPLHYAKPSP FFMDPIYSRV EKRKVTDPVG ALKEKYLRPS PLLFHPQMSA  
IETMTEKLES FAAMKADSGS SLQPLPHHPF NFRSPPTLS DPILRKGKER YTCRYCGKIF  
PRSANLTRHL RTHTGEQPYR CKYCDRSFSI SSNLQRHVRN IHNKEKPFKC HLCNRCFGQQ  
TNLDRHLKKH EHENAPVSQH PGVLTNHLGT SASSPTSESD NHALLDEKED SYFSEIRNFI  
ANSEMNQAST RTEKRAMQI VDGSAQCPGL ASEKQEDVEE EDDDDLEEDD EDSLAGKSQD  
DTVSPAPEPQ AAYEDEEDEE PAASLAVGFD HTRRCAEDHE GLLALEPMP TFGKGLDLRR  
AAEEAFEVKD VLNSTLDSEA LKHTLCRQAK NQAYAMMLSL SEDTPLHTPS QGSLDAWLKV  
TGATSESGAF HPINHL

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human PRDM16 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

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### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three

## Product Details

- different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

## Target Details

Target:	PRDM16
Alternative Name:	PRDM16 ( <a href="#">PRDM16 Products</a> )
Background:	<p>Binds DNA and functions as a transcriptional regulator. Functions in the differentiation of brown adipose tissue (BAT) which is specialized in dissipating chemical energy in the form of heat in response to cold or excess feeding while white adipose tissue (WAT) is specialized in the storage of excess energy and the control of systemic metabolism. Together with CEBPB, regulates the differentiation of myoblastic precursors into brown adipose cells. Functions also as a repressor of TGF-beta signaling. Isoform 4 may regulate granulocytes differentiation.</p> <p>{ECO:0000269 PubMed:12816872, ECO:0000269 PubMed:14656887, ECO:0000269 PubMed:19049980}.</p>
Molecular Weight:	141.2 kDa Including tag.
UniProt:	<a href="#">Q9HAZ2</a>
Pathways:	<a href="#">Stem Cell Maintenance</a> , <a href="#">Brown Fat Cell Differentiation</a>

## 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:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you

## Application Details

receive your protein of interest.

Restrictions: For Research Use only

## Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

## Images



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