

Datasheet for ABIN7555081

PRDM16 Protein (AA 1-1276) (His tag)



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Overview

Quantity:	1 mg
Target:	PRDM16
Protein Characteristics:	AA 1-1276
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRDM16 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat PRDM16 Protein expressed in mammalian cells.
Sequence:	<p>MRSKARARKL AKSDGDVVNN MYEPNRDLLA SHSAEDEAED SAMSPIVGP PSPFPTSEDF</p> <p>TPKEGSPYEA PVYIPEDIPI PADFELRESS IPGAGLGVWA KRKMEAGERL GPCVVVPRAA</p> <p>AKETDFGWEQ ILTDVEVSPQ EGCITKISED LGSEKFCVDA NQAGAGSWLK YIRVACSCDD</p> <p>QNLTMQIQISE QIYYKVIKDI EPGELLVHV KEGVYPLGTV PPGLDEEPTF RCDECDELFG</p> <p>SKLDLRRHKK YTCGSVGAAL YEGLAELKP EGLGGGSGQA HECKDCERMF PNKYSLEQHM</p> <p>VIHTEEREYK CDQCPKAFNW KSNLIRHQMS HDSGKRFECE NCVKVFTDPS NLQRHIRSQH</p> <p>VGARAHACPD CGKTFATSSG LKQHKHIHST VKPFICEVCH KSYTQFSNLC RHKRMHADCR</p> <p>TQIKCKDCGQ MFSTTSSLNK HRRFCEGKNH YTPGGIFAPG LPLTPSPMMD KAKPSPSLNH</p> <p>ASLGFNEYFP SRPHPGSLPF STAPPTFPAL TPGFPGIFPP SLYPRPPLLP PTSLLKSPLN</p> <p>HTQDAKLPSP LGNPALPLVS AVSNSSQGTG AAAGPEEKFE SRLEDSCVEK LKTRSSDMSD</p> <p>GSDFEDVNTT TGTDLDTTGG TGSDLDSDVD SDPDKDKGKG KSAEGQPKFG GGLAPPGAPN</p>

SVAEVPVFYS QHSFFPPPDE QLLTATGAAG DSIKAIASIA EKYFGPGFMG MQEKKLGSLP
YHSAFPFQFL PNFPHSLYPF TDRALAHNLL VKAEPKSPRD ALKVGGPSAE CPFDLTTPKP
DVKPILPMPK GPSAPASGEE QPLDLSIGSR ARASQNGGGR EPRKNHVGGE RKLGAGEGLP
QVCPARMPQQ PPLHYAKPSP FFMDPIYSRV EKRKVTDPVG ALKEKYL RPS PLLFHPQMSA
IETMTEKLES FAAMKADSGS SLQPLPHHPF NFRSPPTLS DPILRKGKER YTCRYCGKIF
PRSANLTRHL RTHTGEQPYR CKYCDRSFSI SSNLQRHVRN IHNKEKPFKC HLCNRCFGQQ
TNLDRHLKKH EHENAPVSQH PGVLTNHLGT SASSPTSESD NHALLDEKED SYFSEIRNFI
ANSEMNQAST RTEKRAMQI VDGSACQPGI ASEQQEDVEE EDDDDLEEDD EDSLAKGSQD
DTVSPAPEPQ AAYEDEEDDEE PAASLAVGFD HTRRCAEDHE GLLALEPMP TFGKGLDLRR
AAEEAFEVKD VLNSTLDSEA LKHTLCRQAK NQAYAMMLSL SEDTPLHTPS QGSLDAWLKV
TGATSESGAF HPINHL

Sequence without tag. The proposed Purification-Tag is based on experiences 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 to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

PRDM16

Alternative Name:

PRDM16 ([PRDM16 Products](#))

Target Details

Background: Histone-lysine N-methyltransferase PRDM16 (EC 2.1.1.367) (PR domain zinc finger protein 16) (PR domain-containing protein 16) (Transcription factor MEL1) (MDS1/EVI1-like gene 1),FUNCTION: Binds DNA and functions as a transcriptional regulator (PubMed:12816872). Displays histone methyltransferase activity and monomethylates 'Lys-9' of histone H3 (H3K9me1) in vitro (By similarity). Probably catalyzes the monomethylation of free histone H3 in the cytoplasm which is then transported to the nucleus and incorporated into nucleosomes where SUV39H methyltransferases use it as a substrate to catalyze histone H3 'Lys-9' trimethylation (By similarity). Likely to be one of the primary histone methyltransferases along with MECOM/PRDM3 that direct cytoplasmic H3K9me1 methylation (By similarity). 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 (By similarity). Together with CEBPB, regulates the differentiation of myoblastic precursors into brown adipose cells (By similarity). Functions as a repressor of TGF-beta signaling (PubMed:19049980). {ECO:0000250|UniProtKB:A2A935, ECO:0000269|PubMed:12816872, ECO:0000269|PubMed:19049980}., FUNCTION: [Isoform 4]: Binds DNA and functions as a transcriptional regulator (PubMed:12816872). Functions as a repressor of TGF-beta signaling (PubMed:14656887). May regulate granulocyte differentiation (PubMed:12816872). {ECO:0000269|PubMed:12816872, ECO:0000269|PubMed:14656887}.

Molecular Weight: 140.3 kDa

UniProt: [Q9HAZ2](#)

Pathways: [Stem Cell Maintenance](#), [Brown Fat 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.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months