

Product datasheet for TP511758

Prdm16 (NM_001177995) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse PR domain containing 16 (Prdm16), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR211758 representing NM_001177995 Red=Cloning site Green=Tags(s)

MRSKARARKLAKSDGDVNNMYEPDPDLLAGQSAEEETEDGILSPIPMGPPSPFPTSEDFTPKEGSPYEA
PVYIPEDIPIPPDFELRESSIPGAGLGIWAKRKMEIGERFGPYVVTTPRAALKEADFGWEQMLTDTEVSSQ
ESCIKKQISEDLGSEKFCVDANQAGSGSWLKYIRVACSCDDQNLAMCQINEQIYYKVIKIDIEPGEELLVH
VKEGAYSLGVMAPSLDEDPTRFCDECEDELFCRLDLRRHKKYACSSAGAQLYEGGLGEELKPEGLGVGSDG
QAHECKDCERMFPNKYSLEQHMIVHTEEREYKCDQCPKAFNWKSNLIRHQMSHDSGKRFECENCVKVFTD
PSNLQRHIRSQHVGARAHACPDGKTFATSSGLKQHKHIHSTVKPFICEVCHKSYTQFSNLCRHKRMHAD
CRTQIKCKDCGQMFSTTSSLNKHRRFCEGKNHYTPGSIFTGPLPTSPMMDKTKPSPTLNHGGLGFSEY
FPSRPHPGSLPFSAAAPPALTPGFPGIFPPSLYPRPPLLPPTPLLSPLNHAQDAKLPSPLGNPALPL
VSAVSNSSQGATAATGSEEKFDGRLEDAYAEKVKNRSPDMSDGSDFEDINTTTGTDLDTTGTGSDLDSD
LSDRDKDGKDKGKPVESKPEFGGASVPPGAMNSVAEVPFYSQHSFFPPPEEQLLTASGAAGDSIKAIAS
IAEKYFGPGFMSMQEKKLGLSLPYHSVFPFQFLPNFPHSLYPFTDRALAHNLLVKAEPKSPRDALKVGGPS
AECPFDLTTKPKAKPALLAPKVPLIPSSGEEQPLDLSIGSRARASQNGGGREPRKNHVYGERKPGVSEG
LPKVCPAQLPQQPSLHYAKPSPFFMDPIYRVEKRKVADPVGVLEKYLKRPSPLLFHPQMSAIETMTEKLE
SFAAMKADSGSSLQPLPHHPFNFRSPPPTLSDPILRKGKERYTCRYCGKIFPRSANLTRHLRHTHTGEQPY
RKYCDRSFSSNLQRHVRNIHNKEKPKCHLCNRCFGQQTNLDRHLKKEHEGAPVSQHSGLVLTNHLG
TSASSPTSESDNHALLDEKEDSYFSEIRNFIANSEMNQASTRMDKRPEIQDLDSNPPCPGSASAKPEDVE
EEEEEELEEDDDSLAGKSQEDTVSPTPEPQGVYEDEEDEEPPSLTMGFDHTRRHMQ

TRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	130.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining



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Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_001171466
Locus ID:	70673
UniProt ID:	A2A934
RefSeq Size:	8433
Cytogenetics:	4 E2
RefSeq ORF:	3531
Synonyms:	5730557K01Rik; csp1; mel1
Summary:	Binds DNA and functions as a transcriptional regulator (PubMed:18483224). Displays histone methyltransferase activity and monomethylates 'Lys-9' of histone H3 (H3K9me1) in vitro (PubMed:22939622). 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 (PubMed:22939622). Likely to be one of the primary histone methyltransferases along with MECOM/PRDM3 that direct cytoplasmic H3K9me1 methylation (PubMed:22939622). 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 (PubMed:17618855, PubMed:18483224). Together with CEBPB, regulates the differentiation of myoblastic precursors into brown adipose cells (PubMed:18719582, PubMed:19641492). Functions as a repressor of TGF-beta signaling.[UniProtKB/Swiss-Prot Function]