

Recombinant Human PR domain containing 16 Protein, His tagged

Cat. No. PRDM16-068H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PRDM16 protein (Q9HAZ2) (Phe 54-Glu 226) with a His tag at the C-terminus was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	54-226aa
Description	Binds DNA and functions as a transcriptional regulator. Displays histone methyltransferase activity and monomethylates 'Lys-9' of histone H3 (H3K9me1) in vitro. 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. Likely to be one of the primary histone methyltransferases along with MECP/PRDM3 that direct cytoplasmic H3K9me1 methylation. 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 as a repressor of TGF-beta signaling.

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Tag	C-His
Molecular Mass	20.6 kDa
Endotoxin	Less than 1.0 EU/μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution	Reconstitute at 250 μg/mL in sterile water.

GENE INFORMATION

Gene Name	PRDM16 PR domain containing 16 [Homo sapiens (human)]
Official Symbol	PRDM16
Synonyms	PRDM16; PR domain containing 16; PR domain zinc finger protein 16; KIAA1675; MDS1/EVI1 like; MEL1; MGC166915; PFM13; transcription factor MEL1; MDS1/EVI1-like gene 1;
Gene ID	63976
mRNA Refseq	NM_022114

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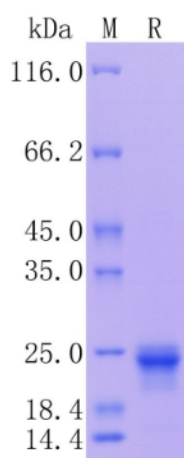
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Protein Refseq NP_071397

MIM 605557

UniProt ID Q9HAZ2

Protein on SDS-PAGE under reducing (R) condition.



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