

# PRDM16 Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM8585b

## Product Information

---

Application	WB, E
Primary Accession	<a href="#">Q9HAZ2</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1740CT793.52.44
Calculated MW	140251

## Additional Information

---

Gene ID	63976
Other Names	PR domain zinc finger protein 16, PR domain-containing protein 16, Transcription factor MEL1, MDS1/EVI1-like gene 1, PRDM16, KIAA1675, MEL1, PFM13
Target/Specificity	This PRDM16 antibody is generated from a mouse immunized with a recombinant protein between 779-996 amino acids from PRDM16.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PRDM16 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

Name	PRDM16 ( <a href="#">HGNC:14000</a> )
Function	Binds DNA and functions as a transcriptional regulator (PubMed: <a href="#">12816872</a> ). 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](#)).

<b>Cellular Location</b>	Nucleus. Cytoplasm
<b>Tissue Location</b>	Expressed in uterus and kidney. Expressed in both cardiomyocytes and interstitial cells.

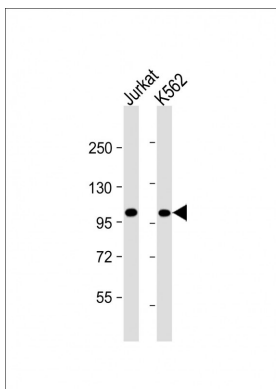
## Background

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.

## References

Mochizuki N.,et al.Blood 96:3209-3214(2000).  
 Fang W.,et al.Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.  
 Nagase T.,et al.DNA Res. 7:347-355(2000).  
 Nakajima D.,et al.DNA Res. 9:99-106(2002).  
 Gregory S.G.,et al.Nature 441:315-321(2006).

## Images



All lanes : Anti-PRDM16 Antibody at 1:4000 dilution Lane 1: Jurkat whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 140 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.