

PRDM16 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13547

Specification

PRDM16 Antibody (C-Terminus) - Product Information

Application	IF
Primary Accession	O9HAZ2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	140kDa KDa

PRDM16 Antibody (C-Terminus) - Additional Information

Gene ID 63976

Other Names

PR domain zinc finger protein 16, PR domain-containing protein 16, Transcription factor MEL1, MDS1/EV11-like gene 1, PRDM16, KIAA1675, MEL1, PFM13

Target/Specificity

Human PRDM16

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

PRDM16 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

PRDM16 Antibody (C-Terminus) - Protein Information

Name PRDM16 ([HGNC:14000](#))

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).

Cellular Location

Nucleus. Cytoplasm

Tissue Location

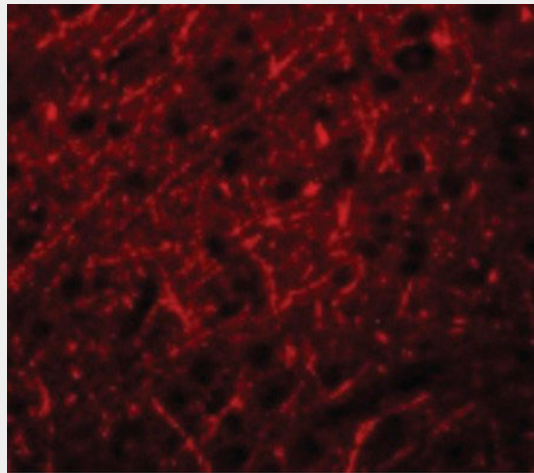
Expressed in uterus and kidney. Expressed in both cardiomyocytes and interstitial cells.

PRDM16 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PRDM16 Antibody (C-Terminus) - Images



Immunofluorescence of PRDM16 in Human Brain cells with PRDM16 antibody at 20 ug/ml.

PRDM16 Antibody (C-Terminus) - 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.

PRDM16 Antibody (C-Terminus) - 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).