

PRDM16 / MEL1 Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF2277a

### Specification

# PRDM16 / MEL1 Antibody (C-Term) - Product Information

Application Primary Accession Other Accession Predicted Host Clonality Concentration Isotype Calculated MW

E <u>O9HAZ2</u> <u>NP\_071397.2</u>, <u>NP\_955533.1</u>, <u>63976</u> Human Goat Polyclonal 0.5 mg/ml lgG 140251

## PRDM16 / MEL1 Antibody (C-Term) - 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

Dilution E~~N/A

**Format** 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** PRDM16 / MEL1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## PRDM16 / MEL1 Antibody (C-Term) - Protein Information

Name PRDM16 (HGNC:14000)

Function

Binds DNA and functions as a transcriptional regulator (PubMed:<a

href="http://www.uniprot.org/citations/12816872" target="\_blank">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:<a href="http://www.uniprot.org/citations/19049980" target=" blank">19049980</a>).

### Cellular Location Nucleus. Cytoplasm

#### **Tissue Location**

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

## PRDM16 / MEL1 Antibody (C-Term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PRDM16 / MEL1 Antibody (C-Term) - Images

## PRDM16 / MEL1 Antibody (C-Term) - Background

This antibody is expected to recognise both reported isoforms.

### PRDM16 / MEL1 Antibody (C-Term) - References

A novel gene, MEL1, mapped to 1p36.3 is highly homologous to the MDS1/EVI1 gene and is transcriptionally activated in t(1;3)(p36;q21)-positive leukemia cells. Mochizuki N, Shimizu S, Nagasawa T, Tanaka H, Taniwaki M, Yokota J, Morishita K. Blood 2000 Nov 1;96(9):3209-14 PMID: 11050005