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Rabbit Anti-PRDM16 antibody

SL8847R

Product Name:	PRDM16
Chinese Name:	转录因子MEL1抗体
Alias:	KIAA1675; MDS1/EVI1 like gene 1; MDS1/EVI1-like gene 1; MEL1; PFM 13; PFM13; PR domain containing 16; PR domain containing protein 16; PR domain zinc finger protein 16; PR domain-containing protein 16; PRD16_HUMAN; Prdm16; Transcription factor MEL 1; Transcription factor MEL1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	150kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PRDM16:1171-1276/1276
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The reciprocal translocation t(1;3)(p36;q21) occurs in a subset of myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML). This gene is located near the 1p36.3 breakpoint and has been shown to be specifically expressed in the t(1:3)(p36,q21)-positive MDS/AML. The protein encoded by this gene is a zinc finger

transcription factor and contains an N-terminal PR domain. The translocation results in the overexpression of a truncated version of this protein that lacks the PR domain, which may play an important role in the pathogenesis of MDS and AML. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

Function:
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.

Subunit:
Interacts with CEBPA, CEBPB and CEBPD; the interaction is direct. Interacts with PPARG and PPARA; controls brown adipocytes differentiation. Interacts with CTBP1 and CTBP2; represses the expression of WAT-specific genes. Interacts with PPARGC1A and PPARGC1B; interaction with PPARGC1A or PPARGC1B activates the transcription of BAT-specific gene. Interacts with SMAD3 (By similarity). Interacts with HDAC1, SKI, SMAD2 and SMAD3; the interaction with SKI promotes the recruitment of SMAD3-HDAC1 complex on the promoter of TGF-beta target genes. {ECO:0000250, ECO:0000269|PubMed:19049980}.

Subcellular Location:
Nucleus.

Tissue Specificity:
Expressed in uterus and kidney.

DISEASE:
Note=A chromosomal aberration involving PRDM16 is found in myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML). Reciprocal translocation t(1;3)(p36;q21). Isoform 4 is specifically expressed in adult T-cell leukemia.

Similarity:
Contains 10 C2H2-type zinc fingers.
Contains 1 SET domain.

SWISS:
Q9HAZ2

Gene ID:
63976

	Database links: Entrez Gene: 63976 Human Entrez Gene: 70673 Mouse Omim: 605557 Human SwissProt: Q9HAZ2 Human SwissProt: A2A935 Mouse Unigene: 409905 Human Unigene: 99500 Human Unigene: 257785 Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.