

Mouse Anti-PRDM16 antibody

SLM-51634M

Product Name	PRDM16
Chinese Name	转录因子 MEL1 单克隆抗体
Alias	KIAA1675; MDS1/EVI1 like gene 1; MDS1/EVI1-like gene 1; MEL1; PFM13; PFM13; PR domain containing 16; PR domain containing protein 16; PR domain zinc finger protein 16; PR domain-containing protein 16; PRD16_HUMAN; Transcription factor MEL 1; Transcription factor MEL1.
Research Area	Tumour Cell biology transcriptional regulatory factor The new supersedes the old
Immunogen Species	Mouse
Clonality	Monoclonal
Clone NO.	G10T8
React Species	Human, WB=1:500-2000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	150kDa
Cellular localization	The nucleus
Form	Liquid
Concentration immunogen	1mg/ml Recombinant human PRDM16 between 779-996 amino acids.
Lsotype	IgG1,k
Purification	affinity purified by Protein G
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed

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.

Product Detail

Subunit:

Interacts with CEBPA, CEBPB and CEBPD; the interaction is direct. Interacts with PPARG and PPARG; 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:

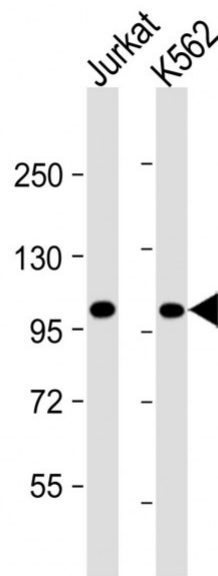
63976

Database links:

[Entrez Gene: 63976](#) Human

[SwissProt: Q9HAZ2](#) Human

Product Picture



Sample:

Lane 1: Jurkat cell lysates



Lane 2: K562 cell lysates

Primary: Anti-PRDM16 (SLM-51634M) at 1/4000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 150 kD

Observed band size: 100 kD