

Polyclonal Antibody to PRDM16 (1137-1150) - Aff - Purified

Alternate names:	KIAA1675, MDS1/EVI1-like gene 1, MEL1, PFM13, PR domain zinc finger protein 16, PR domain-containing protein 16, Transcription factor MEL1
Catalog No.:	AP31995PU-N
Quantity:	0.1 mg
Concentration:	0.5 mg/ml
Background:	PRDM16 is a zinc finger transcription factor and contains an N-terminal PR domain. 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 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. Recent studies have shown that PRDM16 normally acts as a Smad3 binding protein that may be important for the development of orofacial structures through modulation of the TGF-beta signaling pathway. Other experiments have indicated that PRDM16 controls a bidirectional cell fate switch between skeletal myoblasts and brown fat cells.
Uniprot ID:	A2A935
NCBI:	NP_081780.3
GeneID:	70673
Host:	Goat
Immunogen:	Synthetic peptide with sequence from the internal region (near C-Terminus) of Mouse Prdm16 (NP_081780.3; NP_001171466.1) Genename: Prdm16 AA Sequence: C-KSQEDTVSPTPEPQ
Format:	State: Liquid purified Ig fraction Purification: Ammonium Sulphate Precipitation followed by Antigen Affinity Chromatography using the immunizing peptide Buffer System: Tris saline, pH~7.3 Preservatives: 0.02% Sodium Azide Stabilizers: 0.5% BSA
Applications:	Peptide ELISA: 1/8000 (Detection Limit). Western blot: 1-3 µg/ml. Detects a band of Approx 150kDa in Mouse Brain lysates (calculated MW of 141kDa according to NP_081780.3). An additional band of unknown identity was also consistently observed at 85kDa. This band was successfully blocked by incubation with the immunizing peptide. We would

appreciate any feedback from people in the field - have any such results been reported with other antibodies/lysates? Have any further splice variants/modified forms been reported?

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody is expected to recognize both reported isoforms of Prdm16 (NP_081780.3; NP_001171466.1).

Species Reactivity: **Tested:** Mouse.
Expected from sequence similarity: Rat, Canine (Dog).

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Pictures: PRDM16 antibody Cat.-No AP31995PU-N staining of Mouse Brain lysate at 1 µg/ml (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

