

Datasheet for 600-401-H12**PRDM16 Antibody****Overview**

Description:	Anti-PRDM16 (RABBIT) Antibody - 600-401-H12
Item No.:	600-401-H12
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	PRDM16 antibody detects human PRDM16. 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. Anti-PRDM16 antibodies are ideal for investigators involved in enzyme and cytokines and growth factor research.
Synonyms:	PR domain zinc finger protein 16, Transcription factor MEL1, MDS1/EVI1-like gene 1, PRDM16, KIAA1675, MEL1, PFM13
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PRDM16
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	PRDM16 Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the c-terminus of human PRDM16.
Purity/Specificity:	Anti-PRDM16 Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with PRDM16 with Human, Rat and Mouse based on 100% homology with the immunizing sequence. Cross-reactivity with PRDM16 from other sources has not been determined.
Relevant Links:	• NCBI - NP_071397.3 • UniProtKB - Q9HAZ2 • GeneID - 63976

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-PRDM16 Antibody is tested for use in ELISA, Western Blot, immunofluorescence, and Immunohistochemistry. Expect a band approximately ~140.2 kDa in western blot using positive control K562 whole cell lysates, or other specific cell lysates or tissues. Western Blot tested in human samples; Immunohistochemistry and Immunofluorescence in human and mouse samples. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	20µg/mL
IHC:	2µg/mL
WB:	1-2 ug/mL

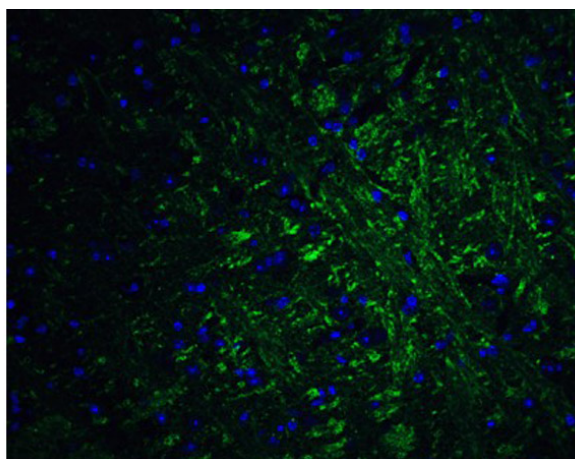
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



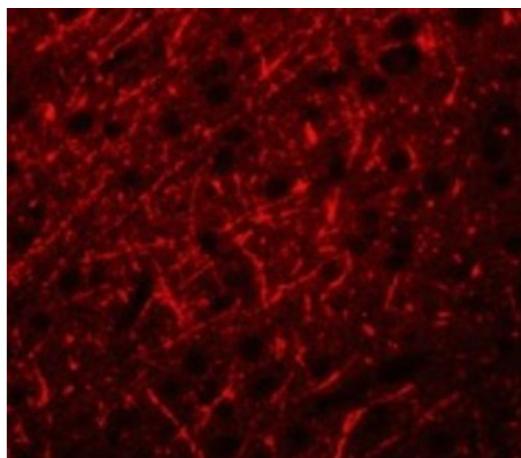
Immunofluorescence Microscopy

Immunofluorescence of PRDM16.

Tissue: mouse brain tissue.

Primary Antibody: Anti-PRDM16 antibody at 20 µg/ml.

Staining: PRDM16 Antibody (green), DAPI (blue).

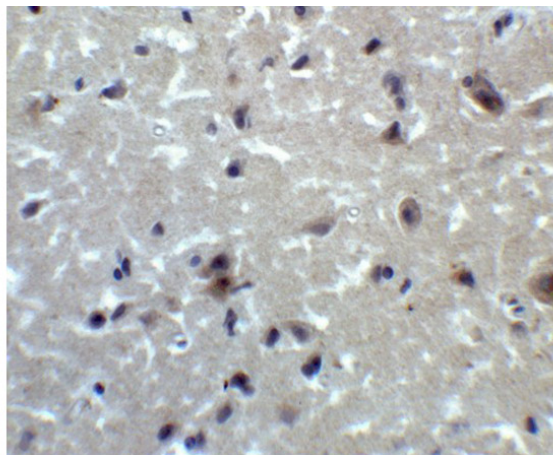


Immunofluorescence Microscopy

Immunofluorescence of PRDM16.

Cell: Human Brain cells.

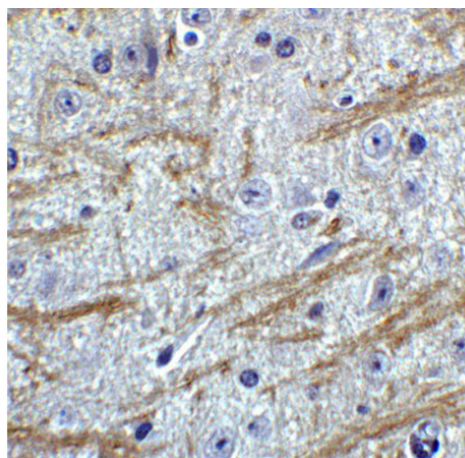
Primary Antibody: Anti-PRDM16 antibody at 20 µg/mL.

**Immunohistochemistry**

Immunohistochemistry of PRDM16.

Tissue: human brain tissue.

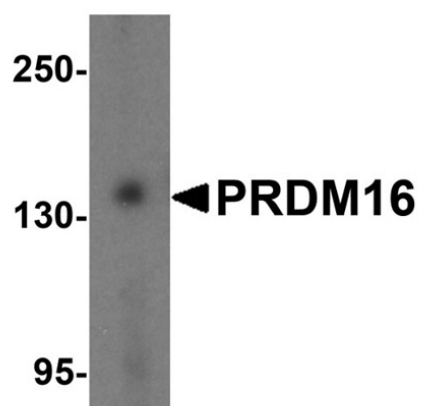
Primary Antibody: Anti-PRDM16 antibody at 2 µg/ml.

**Immunohistochemistry**

Immunohistochemistry of PRDM16.

Tissue: mouse brain tissue.

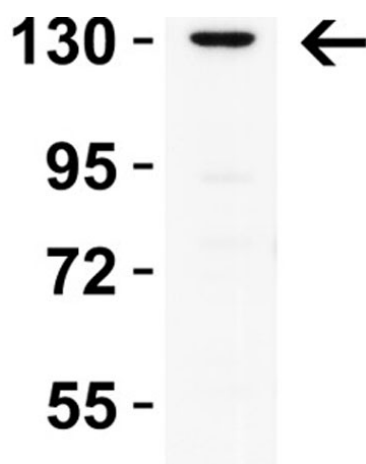
Primary Antibody: Anti-PRDM16 antibody at 2 µg/ml.

**Western Blot**

Western blot analysis of PRDM16.

Load: K562 cell lysate.

Primary Antibody: Anti-PRDM16 antibody at 1 µg/mL.



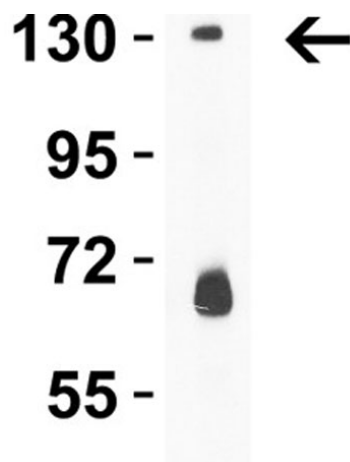
Western Blot

Western Blot of PRDM16.

Load: 15 µg of MCF7 cell lysate.

Primary Antibody: PRDM16 at 1 µg/mL for 1 h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



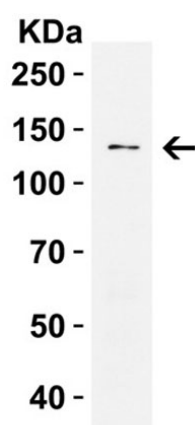
Western Blot

Western Blot of PRDM16.

Load: 15 µg of mouse lung lysate.

Primary Antibody: PRDM16 at 2 µg/mL for 1 h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



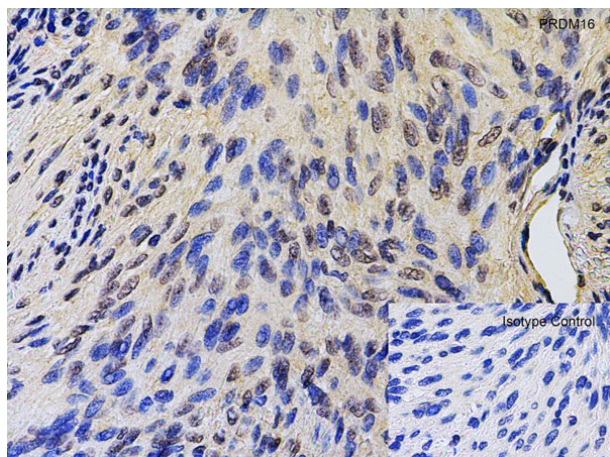
Western Blot

Western Blot of PRDM16.

Load: 15 µg of rat spleen lysate.

Primary Antibody: PRDM16 at 2 µg/mL for 1 h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



Immunohistochemistry

Immunohistochemistry of PRDM16.

Tissue: Human Brain.

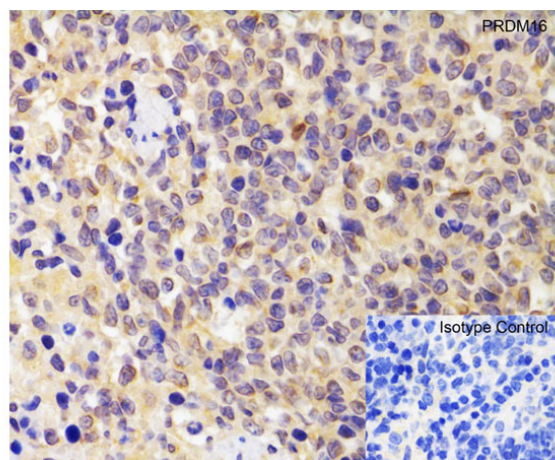
Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen Retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-PRDM16 antibody at 2 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 dilution.

Counter stained with Hematoxylin.



Immunohistochemistry

Immunohistochemistry of PRDM16.

Tissue: Rat Spleen.

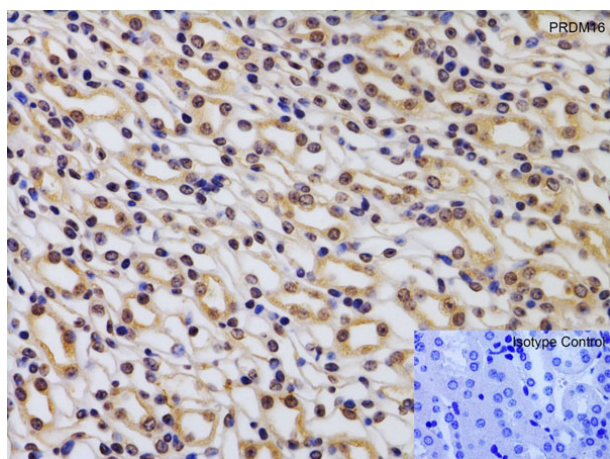
Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen Retrieval: heat mediation with a citrate buffer (pH6).

Primary antibody: anti-PRDM16 antibody at 2 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 dilution.

Counter stained with Hematoxylin.



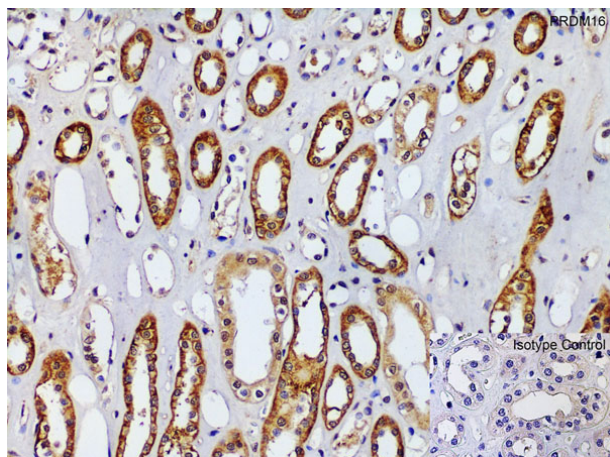
Immunohistochemistry

Immunohistochemistry of PRDM16.

Tissue: Mouse Kidney.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT. Antigen Retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-PRDM16 antibody at 2 µg/ml overnight at 4°C. Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 dilution. Counter stained with Hematoxylin.

**Immunohistochemistry**

Immunohistochemistry of PRDM16.

Tissue: Human Kidney.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen Retrieval: heat mediation with a citrate buffer (pH6).

Primary antibody: anti-PRDM16 antibody at 2 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 dilution.

Counter stained with Hematoxylin.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.