

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# Prdm9 polyclonal antibody

Catalog: BS78012 Host: Rabbit Reactivity: Mouse, Rat

#### **BackGround:**

Histone methyltransferase that sequentially mono-, di-, and tri-methylates both 'Lys-4' (H3K4 and 'Lys-36' (H3K36 of histone H3 to produce respectively trimethylated 'Lys-4' (H3K4me3 and trimethylated 'Lys-36' (H3K36me3 histone H3 and plays a key role in meiotic prophase by determining hotspot localization thereby promoting meiotic recombination. Also can methylate all four core histones with H3 being the best substrate and the most highly modified. Is also able, on one hand, to mono and di-methylate H4K20 and on other hand to trimethylate H3K9 with the di-methylated H3K9 as the best substrate. During meiotic prophase, binds specific DNA sequences through its zinc finger domains thereby determining hotspot localization where it promotes local H3K4me3 and H3K36me3 enrichment on the same nucleosomes through its histone methyltransferase activity. Thereby promotes double-stranded breaks (DSB formation, at this subset of PRDM9-binding sites, that initiates meiotic recombination for the proper meiotic progression.

### **Product:**

1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

#### **Molecular Weight:**

97KDa

#### **Swiss-Prot:**

Q96EQ9

#### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

# **Applications:**

IF/ICC,1:50 - 1:200

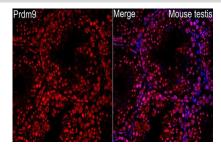
# Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

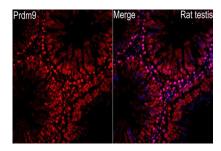
## **Specificity:**

Prdm9 polyclonal antibody detects endogenous levels of Prdm9 protein.

### **DATA:**



Immunofluorescence analysis of mouse testis using Prdm9 pAb at dilution of 1:100 (40x lens).



Immunofluorescence analysis of rat testis using Prdm9 pAb at dilution of 1:100 (40x lens).

### Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151