

### 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:**

100KDa

#### **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:**

WB,1:500 - 1:2000|ChIP,1:50 - 1:200

### Storage&Stability:

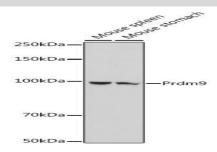
Store at 4 ℃ short term. Aliquot and store at -20 ℃ long

term. Avoid freeze-thaw cycles.

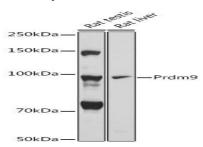
### **Modification:**

Unmodification

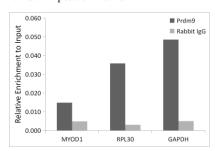
### **DATA:**



Western blot analysis of extracts of various cell lines, using Prdm9 antibody at 1:1000 dilution.<br/>Secondary antibody: HRP Goat Anti-Rabbit IgG at 1:10000 dilution.<br/>br/>Lysates/proteins: 25ug per lane.<br/>br/>Blocking buffer: 3% nonfat dry milk in TBST.<br/>Detection: ECL Basic Kit.<br/>Exposure time: 1s.



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Chromatin immunoprecipitation analysis of extracts of Mouse testis,

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using Prdm9 antibody and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.

Note:

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

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