

A Reliable Research Partner in Life Science and Medicine

# **Prdm9 Polyclonal Antibody**

catalog number: E-AB-92241

Note: Centrifuge before opening to ensure complete recovery of vial contents.

### Description

Reactivity Mouse; Rat

**Immunogen** Recombinant fusion protein of mouse Prdm9

Host Rabbit
Isotype IgG

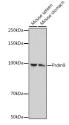
**Purification** Affinity purification

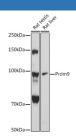
**Buffer** Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.

# **Applications** Recommended Dilution

**WB** 1:500-1:2000

#### Data





Western blot analysis of extracts of various cell lines using Prdm9 Polyclonal Antibody at 1:1000 dilution.

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Observed-MW: 100 kDa Calculated-MW: 97 kDa Observed-MW: 100 kDa Calculated-MW: 97 kDa

# Preparation & Storage

Storage Storage Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.

**Shipping** The product is shipped with ice pack, upon receipt, store it immediately at the

temperature recommended.

# Background

Histone methyltrans ferase 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.

# For Research Use Only

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