

Recombinant PRDM9 (191-414) protein

Catalog No: 31510**Expressed In:** *E. coli***Quantity:** 20 µg**Concentration:** 1.2 µg/µl**Source:** Human

Buffer Contents: Recombinant PRDM9 protein was expressed in *E. coli* and is supplied in 20 mM Tris pH 7.5, 300 mM NaCl, 0.5 mM TCEP, 5 % glycerol, 1 µM ZnCl₂. Please refer to product insert upon arrival for lot-specific concentration.

Background: PRDM9 (PR Domain Containing 9) is a Histone methyltransferase that specifically trimethylates Lys-4 of histone H3 during meiotic prophase and is essential for proper meiotic progression. Does has the ability to mono- and dimethylate Lys-4 of histone H3. H3 Lys-4 methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in the transcriptional activation of genes during early meiotic prophase (By similarity).

Protein Details: Recombinant PRDM9 protein contains amino acids 191 - 414 of the human PRDM9 (accession number NP_064612.2) with a GST-Tag and expressed in *E. coli* with a molecular weight of 25.6 kDa.

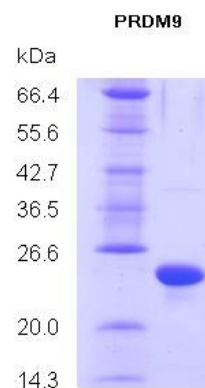
Application Notes: Recombinant PRDM9 is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling.

Specific Activity: H3K4me3 methyltransferase

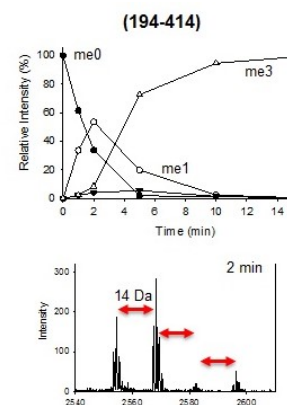
HMT Assay Conditions: 50 mM TrisCl, pH 8.5, 30 mM NaCl, 5% glycerol, 2 mM DTT, 5, 25, and 50 µM H3 (1-24) peptide, 100 nM Recombinant PRMT5 protein at room temperature.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Recombinant PRDM9 protein gel. PRDM9 protein was run on a 12% SDS-PAGE gel and stained with Coomassie blue.



Recombinant PRDM9 protein activity assay.

PRDM9 protein was used in an HMT assay to determine enzyme activity. Activity was detected by MALDI-TOF.