

Recombinant PRDM9 (191-415) protein

Catalog No: 81118

Lot No: 01318001

Expressed In: *E. coli*

Quantity: 50, 1000 µg

Concentration: 0.4 µg/µl

Source: Human

Buffer Contents: Recombinant PRDM9 protein is supplied at a concentration of 0.4 µg/µl in 25 mM Tris-HCl pH 8.0, 300 mM NaCl, 10% glycerol and 0.5 mM TCEP.

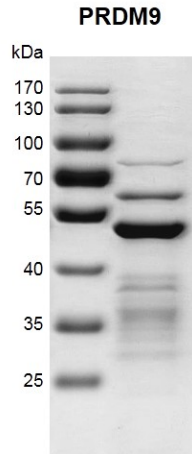
Background: PRDM9 (PR Domain Containing 9) is a Histone methyltransferase that specifically trimethylates Lys-4 of histone H3 during meiotic prophase and is essential for proper meiotic progression. PRDM9 has the ability to mono- and dimethylate Lys-4 of histone H3. H3 Lys-4 methylation represents a 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 corresponding to amino acids 191-415 of human PRDM9 (accession number NP_064612.2) was expressed in *E. coli* cells with an N-terminal GST tag. The molecular weight of this protein is 52 kDa.

Application Notes: This protein is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

HMT Assay Conditions: 1 µM histone peptide H3 (1-21aa) was incubated with different concentrations of PRDM9 protein in 10 µl reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, 1 mM TCEP for 3 hours, then 10 µl H3K4me3 antibody and SA-XL665 mixture (each 1:100 dilution in HTRF Detection Buffer) was added to each reaction system and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.

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 for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



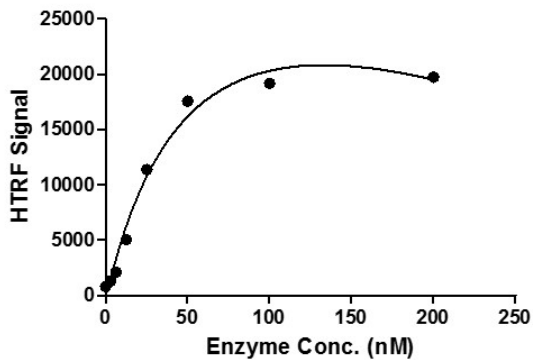
Recombinant PRDM9 protein

10% SDS-PAGE Coomassie staining

MW: 52 kDa

Purity: > 70%

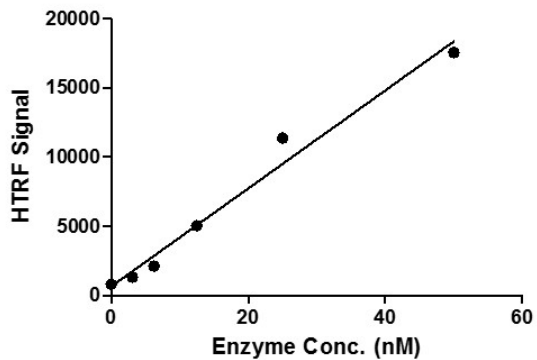
PRDM9 (191-415) Titration



HTRF assay for PRDM9 (191-415) activity

1 μ M histone peptide H3 (1-21) was incubated with PRDM9 (191-415) in reaction buffer for 3 hours at room temperature. HTRF assay was used for detection. H3K4me3 antibody was used to detect reaction product.

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