

**NRMT (D9D6P) Rabbit mAb**

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<b>Applications:</b> W	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 25	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q9BV86	<b>Entrez-Gene Id:</b> 28989
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**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

NRMT (D9D6P) Rabbit mAb recognizes endogenous levels of total NRMT protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu49 of human NRMT protein.

**Background**

N-terminal RCC1 methyltransferase (NRMT), formerly known as methyltransferase-like protein 11A (METTL11A), is a member of the methyltransferase 11 family of proteins and is the first α-N-methyltransferase to be discovered in humans (1-3). Amino-terminal methylation of free α-amino groups is a post-translational modification where an initiating Met residue is cleaved and the exposed α-amino group is mono-, di-, or trimethylated by NRMT (4). NRMT methylates proteins containing an amino-terminal Met-X-Pro-Lys motif, where X is an alanine, proline, or serine residue (4). Substrates of NRMT include the Ran guanine nucleotide-exchange factor (RCC1), SET/TAF-1/PHAP-II, retinoblastoma (Rb), and CENP-B (3-6). α-N-methylation of RCC1 is required for efficient binding to chromatin, securing normal bipolar spindle formation and chromosome segregation (3,5). α-N-methylation of CENP-B also appears to regulate CENP-B binding to centromeric DNA (6).

**Background References**

1. Wrighton, K.H. (2010) *Nat Rev Mol Cell Biol* 11, 604-5.
2. Webb, K.J. et al. (2010) *Biochemistry* 49, 5225-35.
3. Tooley, C.E. et al. (2010) *Nature* 466, 1125-8.
4. Petkowski, J.J. et al. (2012) *Biochemistry* 51, 5942-50.
5. Chen, T. et al. (2007) *Nat Cell Biol* 9, 596-603.
6. Dai, X. et al. (2013) *J Proteome Res* 12, 4167-75.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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