

DNMT1 monomethyl Lys142 antibody (pAb)

Catalog No.: RA9007

Basic Information

Molecular weight

200kDa

Category

Polyclonal antibody

Applications

WB

Cross-Reactivity

Human

Background

DNMT1 (DNA (Cytosine-5)-Methyltransferase 1) methylates CpG residues. Preferentially methylates hemimethylated DNA. Associates with DNA replication sites in S phase maintaining the methylation pattern in the newly synthesized strand, that is essential for epigenetic inheritance. Associates with chromatin during G2 and M phases to maintain DNA methylation independently of replication. It is responsible for maintaining methylation patterns established in development. DNA methylation is coordinated with methylation of histones. Mediates transcriptional repression by direct binding to HDAC2. In association with DNMT3B and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Methylation at lysine 142 by SETD7 promotes DNMT1 proteasomal degradation while phosphorylation of serine 143 via AKT blocks degradation. These modifications appear to play an important role in regulating DNMT enzyme activity and thus levels of DNA methylation.

Recommended Dilutions

WB 1:500 - 1:1,000

Product Information

Source	Rabbit
Isotype	IgG
Purification	Affinity Purified
Storage buffer	Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.
Storage Conditions	Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage..

Note: For in vitro research use only, not for diagnostic or therapeutic use, This product is not a medical device.

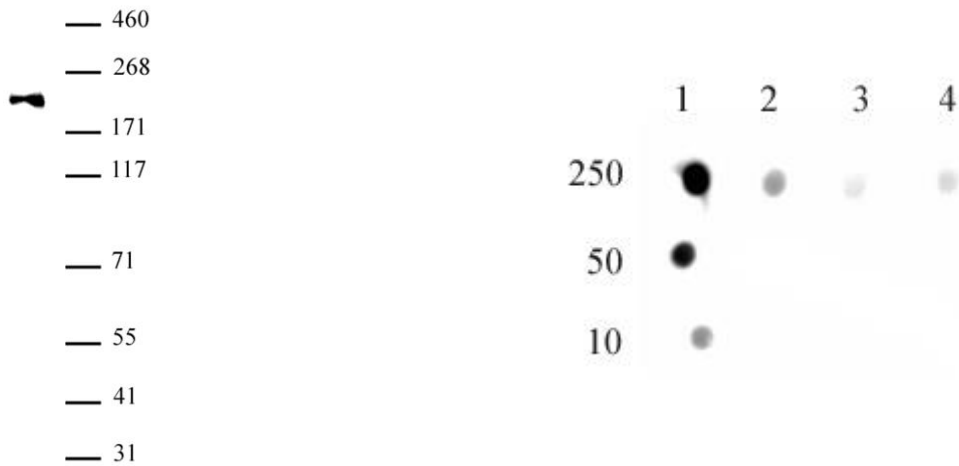
注意:在体外研究使用, 不用于诊断或治疗用途, 本产品不是医疗装置!

Web:www.ruisbio.com

Tel:400-689-7068

Sales: sales@ruisbio.com





AbFlex Histone H3K27me3 antibody (rAb) tested by ChIP-Seq Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT High Sensitivity Kit (Cat. No. 53040) with 17 ug of B2B cell chromatin and 5 ug of antibody. ChIP DNA was sequenced on the Illumina NextSeq and 14 million sequence tags were mapped to identify Histone H3K27me3 binding sites on chromosome 17.

DNMT1 monomethyl Lys142 antibody (pAb) tested by dot blot analysis. Dot blot analysis was used to confirm the specificity of DNMT1 monomethyl Lys142. Peptides corresponding to the immunogen and the unmodified version of the immunogen were spotted onto PVDF and probed with the antibody at 1:100,000. The amount of peptide (picomoles) spotted is indicated next to each row. Lane 1: Monomethyl Lys142 peptide. Lane 2: Dimethyl lysine 142 peptide. Lane 3: Trimethyl lysine142 peptide. Lane 4: Unmodified lysine 142 peptide.

