abcam

Product datasheet

Recombinant mouse Dnmt1 protein ab91367

1 References 1 图像

描述

产**品名称** 重组小鼠Dnmt1蛋白

生物活性 Specific activity: 17 units/ul. Definition of specific activity: 1 unit is defined as the amount of the

enzyme that transfer 1 pmole of methyl group to poly dI-dC substrate during 30 minutes at 37°C'

纯**度** > 95 % SDS-PAGE.

Affinity purified.

表达系统 Baculovirus infected insect cells

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Mouse

氨基酸 290 to 1620

技术指标

Our Abpromise guarantee covers the use of ab91367 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 Functional Studies

SDS-PAGE

形式 Liquid

补充说明 The Dnmt1 Reaction Buffer (5x) and S-adenosylmethionine (SAM) are NOT included. Customers

will have to obtain these before starting their experiment. Reaction Conditions: Incubate in 1 \times Dnmt1 Reaction Buffer (20mM Tris-HCI, pH7.4, 0.5 mM EDTA, 0.2 mM DTT, 5% glycerol) with

 $10\mu M$ S-adenosylmethionine (SAM) at $37^{\circ}C.$

制备和贮存

稳定性和存储 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 6

Constituents: 0.238% HEPES, 50% Glycerol (glycerin, glycerine), 1.16% Sodium chloride

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常规信息

功能 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.

组织特异性 Ubiquitous; highly expressed in fetal tissues, heart, kidney, placenta, peripheral blood

mononuclear cells, and expressed at lower levels in spleen, lung, brain, small intestine, colon,

liver, and skeletal muscle. Isoform 2 is less expressed than isoform 1.

序列相似性 Belongs to the C5-methyltransferase family.

Contains 2 BAH domains.

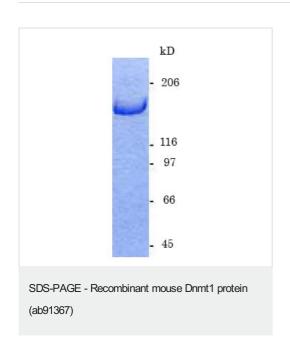
Contains 1 CXXC-type zinc finger.

结**构域** The N-terminal part is required for homodimerization and acts as a regulatory domain.

翻译后修饰 Sumoylated; sumoylation increases activity.

细胞定位 Nucleus.

图片



SDS-PAGE showing ab91367 at approximately 140kDa.

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