# abcam

## Product datasheet

# Recombinant Mouse Dnmtl protein ab136360

#### 1 Image

#### **Description**

Product name Recombinant Mouse Dnmt1 protein

**Purity** > 70 % Densitometry.

Affinity purified.

**Expression system** Baculovirus infected Sf9 cells

Accession P13864

Protein length Protein fragment

Animal free No

**Nature** Recombinant

**Species** Mouse

Sequence

VSVIP DDSSKPLYLA RVTALWEDKN GQMMFHAHWF CAGTDTVLGA TSDPLELFLV GECENMQLSY IHSKVKVIYK

APSENWAMEG GTDPETTLPG AEDGKTYFFQ LWYNQEYARF ESPPKTQPTE DNKHKFCLSC

IRLAELRQKE MPKVLEQIEE VDGRVYCSSI TKNGVVYRLG

DSVYLPPEAF TFNIKVASPV KRPKKDPVNE

TLYPEHYRKY SDYIKGSNLD APEPYRIGRI KEIHCGKKKG KVNEADIKLR LYKFYRPENT HRSYNGSYHT DINMLYWSDE

EAVVNFSDVQ GRCTVEYGED LLESIQDYSQ
GGPDRFYFLE AYNSKTKNFE DPPNHARSPG
NKGKGKGKGK GKGKHQVSEP KEPEAAIKLP
KLRTLDVFSG CGGLSEGFHQ AGISETLWAI
EMWDPAAQAF RLNNPGTTVF TEDCNVLLKL
VMAGEVTNSL GQRLPQKGDV EMLCGGPPCQ
GFSGMNRFNS RTYSKFKNSL VVSFLSYCDY
YRPRFFLLEN VRNFVSYRRS MVLKLTLRCL

VRMGYQCTFG VLQAGQYGVA QTRRRAIILA AAPGEKLPLF PEPLHVFAPR ACQLSVVVDD

KKFVSNITRL SSGPFRTITV RDTMSDLPEI QNGASNSEIP

YNGEPLSWFQ RQLRGSHYQP ILRDHICKDM SPLVAARMRH IPLFPGSDWR DLPNIQVRLG DGVIAHKLQY TFHDVKNGYS STGALRGVCS CAEGKACDPE SRQFSTLIPW CLPHTGNRHN HWAGLYGRLE WDGFFSTTVT NPEPMGKQGR VLHPEQHRVV SVRECARSQG FPDSYRFFGN

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Predicted molecular weight 132 kDa

Amino acids 766 to 1620

#### **Specifications**

Our **Abpromise guarantee** covers the use of **ab136360** in the following tested applications.

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

**Applications** Western blot

SDS-PAGE

Form Liquid

#### **Preparation and Storage**

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.31% Glutathione, 0.002% PMSF, 0.004% DTT, 0.79% Tris HCI, 0.003% EDTA,

25% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

#### **General Info**

Function 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.

**Tissue specificity**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.

**Sequence similarities**Belongs to the C5-methyltransferase family.

Contains 2 BAH domains.

Contains 1 CXXC-type zinc finger.

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

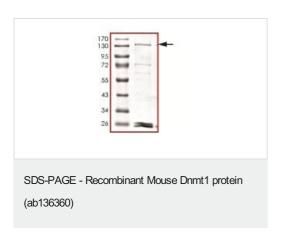
Post-translational

modifications

Sumoylated; sumoylation increases activity.

Cellular localization Nucleus.

#### **Images**



SDS-PAGE using ab136360

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