Datasheet for ABIN2783648

anti-DNMT3B antibody (Middle Region)

2 Images

Overview

Quantity:	100 μL
Target:	DNMT3B
Binding Specificity:	Middle Region
Reactivity:	Human, Mouse, Rat, Cow, Dog, Guinea Pig, Horse, Rabbit, Zebrafish (Danio rerio)
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DNMT3B antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the middle region of human DNMT3B
Sequence:	GTGRLFFEFY HLLNYSRPKE GDDRPFFWMF ENVVAMKVGD KRDISRFLEC
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 100%, Horse: 100%, Human: 100%, Mouse: 100%, Rabbit: 100%, Rat: 100%, Zebrafish: 100%
Characteristics:	This is a rabbit polyclonal antibody against DNMT3B. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	DNMT3B

Target Details

Alternative Name:	DNMT3B (DNMT3B Products)
Background:	DNMT3B is required for genome wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. DNMT3B may preferentially methylate nucleosomal DNA within the nucleosome core region. DNMT3B may function as transcriptional co-repressor by associating with CBX4 and independently of DNA methylation. DNMT3B seems to be involved in gene silencing. In association with DNMT1 and via the recruitment of CTCFL/BORIS, DNMT3B is involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in this gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. Six alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined. Alias Symbols: ICF, M.HsaIIIB, ICF1 Protein Interaction Partner: RBBP7, RBBP4, HDAC2, HDAC1, CHD4, MTA2, MTA1, POLR2H, POLR2C, POLR2A, DNMT1, LEO1, CDC73, PAF1, RTF1, CTR9, NRIP1, EZH2, DNMT3L, SUZ12, SIRT1, EED, UBC, EPHB1, CREB1, CBX5, TRIM28, ZFP57, UHRF2, UHRF1, MAP1LC3B, UBE2W, PLEKHJ1, DUSP23, CMTM6, PAM16, TSC22 Protein Size: 770
Molecular Weight:	86 kDa
Gene ID:	1789
NCBI Accession:	NM_175849, NP_787045

Application Details

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Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 770 AA
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Images
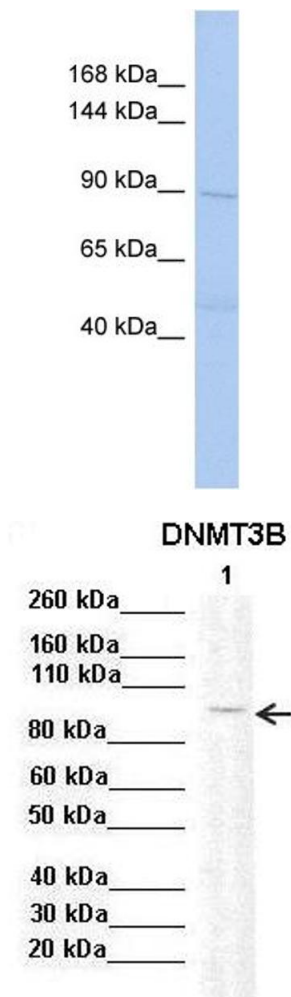
Western Blotting

Image 1. WB Suggested Anti-DNMT3B Antibody Titration: 0.2-1 ug/ml ELISA Titer: 1:1562500 Positive Control: OVCAR-3 cell lysate DNMT3B is supported by BioGPS gene expression data to be expressed in OVCAR3

Western Blotting

Image 2. Sample Type : Lane 1: 20ug mouse mesenchymal stem cell lysate Primary Antibody Dilution : 1:2000 Secondary Antibody: Anti-rabbit-HRP Secondary Antibody Dilution: 1:10,000 Color/Signal Descriptions: DNMT3B Gene Name: Anonymous Submitted by: