Datasheet for ABIN759761

anti-MBD1 antibody (AA 101-200)

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Overview

Quantity:	100 µL
Target:	MBD1
Binding Specificity:	AA 101-200
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MBD1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human MBD1
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Predicted Reactivity:	Mouse
Purification:	Purified by Protein A.

Target Details

Target:	MBD1

Target Details

Alternative Name:	MBD1 (MBD1 Products)
Background:	Synonyms: CXXC 3, CXXC3, MBD 1, MBD1, MECP1 COMPLEX, Methyl CpG binding domain protein 1, Methyl CpG binding domain protein 1 isoform PCM1, Methyl CpG binding protein MBD1, Methyl CpG binding protein splice variant 1, Methyl CpG binding protein splice variant 2, Methyl CpG binding protein splice variant 3, Methyl CpG binding protein splice variant 4, PCM 1, PCM1, Protein containing methyl CpG binding domain 1, Regulator of fibroblast growth factor 2 FGF 2 transcription, RFT, The regulator of fibroblast growth factor 2FGF 2 transcription. Background: DNA methylation, or the addition of methyl groups to cytosine bases in the dinucleotide CpG, is imperative to proper development and regulates gene expression. The methylation pattern involves the enzymatic processes of methylation and demethylation. The demethylation enzyme was recently found to be a mammalian protein, which exhibits demethylase activity associated to a methyl-CpG-binding domain (MBD). The enzyme is able to revert methylated cytosine bases to cytosines within the particular dinucleotide sequence mdCpdG by catalyzing the cleaving of the methyl group as methanol. MeCP2 and MBD1 (PCM1) are first found to repress transcription by binding specifically to methylated DNA. MBD2 and MBD4 (also known as MED1) were later found to colocalize with foci of heavily methylated satellite DNA and believed to mediate the biological functions of the methylation signal. Surprisingly, MBD3 does not bind methylated DNA both in vivo and in vitro. MBD1, MBD2, MBD3, and MBD4 are found to be expressed in somatic tissues, but the expression of MBD1 and MBD2 is reduced or absent in embryonic stem cells, which are known to be deficient in MeCP1 activity. MBD4 have homology to bacterial base excision repair DNA N-glycosylases/lyases. In some microsatellite unstable tumors MBD4 is mutated at an exonic polynucleotide tract.
Gene ID:	4152

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months