Datasheet for 600-401-X42

MBD1 Antibody

Overview

Description:	Anti-MBD1 (RABBIT) Antibody - 600-401-X42
Item No.:	600-401-X42
Size:	50 µg
Applications:	ChIP, ELISA, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	MBD1 is a transcriptional repressor that specifically binds to methylated CpG dinucleotides in promoter sequences. MBD1 acts by recruiting a variety of histone deacetylases (HDAC's) and chromatin remodelling factors. MBD1-dependent transcriptional repression is mediated by ATF7IP through the recruitment of factors such as the histone methyltransferase SETDB1. MBD1 probably forms a complex with SETDB1 and ATF7IP which couples DNA methylation to H3K9 trimethylation and represses transcription. Anti-MBD1 Antibody is ideal for research in Epigenetics, Gene Expression and Chromatin Remodeling.
Synonyms:	Methyl-CpG-binding domain protein 1, CXXC-type zinc finger protein 3, Methyl-CpG-binding protein MBD1, Protein containing methyl-CpG-binding domain 1, CXXC3, PCM1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MBD1
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-MBD1 Antibody was produced in rabbits by repeated immunizations with a synthetic peptide containing a sequence from the N-terminus of human MBD1.

Purity/Specificity:	Anti-MBD1 Antibody was purified by affinity purification. Cross reactivity with other species was not tested.
Relevant Links:	• UniProtKB - Q9UIS9 • GeneID - 4152 • NCBI - NP_001191065.1

Application Details

Tested Applications:	ChIP, ELISA, WB
Application Note:	Anti-MBD1 Antibody is tested for Chromatin Immunoprecipitation, ELISA and Western Blots. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 75 kDa in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ChIP:	1.5 µg per IP
ELISA:	1:1,000
WB:	1:500

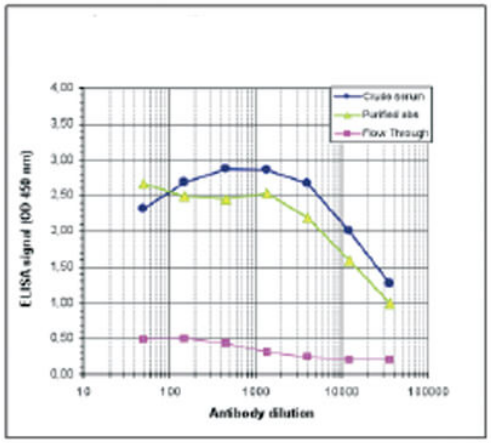
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.7 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.05% (w/v) Sodium Azide and 0.05% ProClin 300
Stabilizer:	None

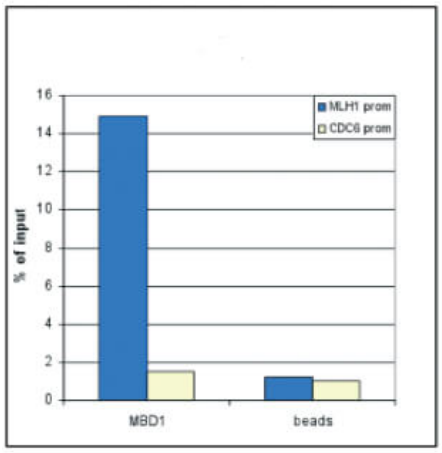
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

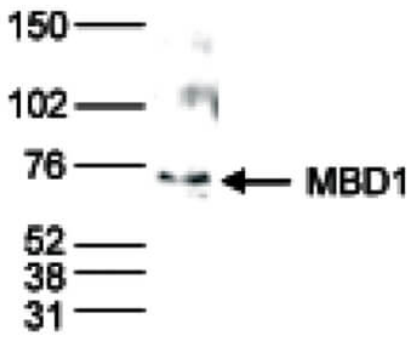
Images



ELISA
ELISA results of rabbit anti-MBD1 antibody. Antigen: human MBD1 peptide. Coating amount: 0.1 µg per well. Primary antibody: Purified anti-human MBD1 antibody, crude serum, and flow through. Dilution series: serial dilution. Estimated Antibody Titer to be 1:20,000. Secondary antibody: Peroxidase anti-Rabbit secondary antibody at 1:20,000. Substrate: TMB (p/n TMBE-1000).



ChIP
Chromatin Immunoprecipitation performed with rabbit anti-MBD1 antibody. ChIP assays were performed using human osteosarcoma (U2OS) cells and optimized PCR primer sets. Sheared chromatin from 1x10e6 cells and 1.5 µg of antibody were used per ChIP experiment. Beads only were used as a negative IP control. Quantitative PCR was performed with primers for the promoters of the MLH1 gene (used as a positive control) and CDC6 gene (used as a negative control). This figure shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).



Western Blot
Western Blot results of Rabbit anti-MBD1 antibody. Lane 1: Nuclear extracts of HeLa cells. Load: 40 µg per lane. Primary Antibody: anti-MBD1 antibody at 1:500 overnight at 4°C. Block: TBS-Tween / 5% BLOTTO. Secondary Antibody: anti-rabbit HRP at 1:10,000 for 1hr at RT.

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