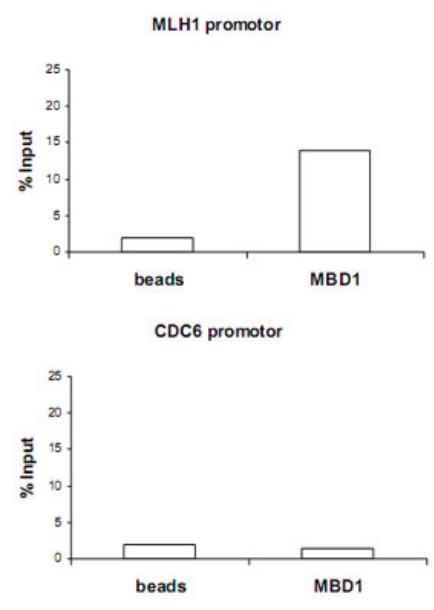
MBD1 polyclonal antibody

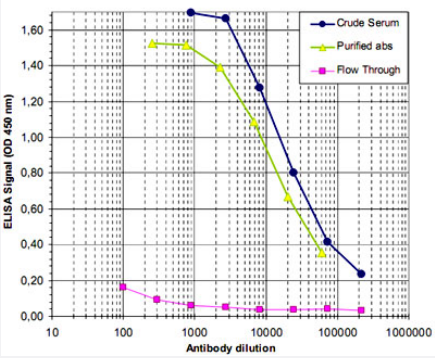
Catalog # PAB14126 Size 50 ug

Applications



ChIP

ChIP assays were performed using the U-2 OS (human osteosarcoma cell line), MBD1 polyclonal antibody (Cat # PAB14126) and optimized PCR primer sets.
Chromatin sheared from 1x10^6 cells and 1.7 ug of MBD1 antibody or beads only were used per ChIP experiment.
Figure shows the recovery as a % of the input DNA.
Upper : Recovery by MBD1 or beads only of the MLH1 promoter, which specifically binds MBD1 (ref 1).
Bottom : Recovery of the CDC6 promoter (used as a negative control) by MBD1 or beads only.



Enzyme-linked Immunoabsorbent Assay

ELISA was performed using a serial dilution of MBD1 polyclonal antibody (Cat # PAB14126), crude serum and Flow Through in antigen coated wells.
By plotting the absorbance against the antibody dilution, the titer of the purified antibody was estimated to be 1 : 16,500.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of MBD1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human MBD1.
Host	Rabbit

Reactivity	Human
Form	Liquid
Recommend Usage	ELISA (1:300-1:1000) ChIP (1.7 ug/ChIP) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide, 0.05% proclin 300)
Storage Instruction	Store at -20°C. For long term storage store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- ChIP

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Gene Info — MBD1

Entrez GeneID	4152
Protein Accession#	Q9UIS9
Gene Name	MBD1
Gene Alias	CXXC3, PCM1, RFT
Gene Description	methyl-CpG binding domain protein 1
Omim ID	156535
Gene Ontology	Hyperlink

Gene Summary	DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). Each of these proteins, with the exception of MBD3, is capable of binding specifically to methylated DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promoters. Five transcript variants of the MBD1 are generated by alternative splicing resulting in protein isoforms that contain one MBD domain, two to three cysteine-rich (CXXC) domains, and some differences in the COOH terminus. All five transcript variants repress transcription from methylated promoters; in addition, variants with three CXXC domains also repress unmethylated promoter activity. MBD1 and MBD2 map very close to each other on chromosome 18q21. [provided by RefSeq
Other Designations	OTTHUMP00000163504|OTTHUMP00000163506|OTTHUMP00000163507|methyl-CpG binding domain protein 1 isoform PCM1|the regulator of fibroblast growth factor 2 (FGF-2) transcription

Publication Reference

- hMLH1 promoter methylation and silencing in primary endometrial cancers are associated with specific alterations in MBDs occupancy and histone modifications.

  Xiong Y, Dowdy SC, Eberhardt NL, Podratz KC, Jiang SW.

  Gynecologic Oncology 2006 Oct; 103(1):321.

  Application: ChIP, WB-Ti, Human, Endometrial cancer

Disease

- Adenocarcinoma
- Carcinoma
- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Lung Neoplasms
- Neoplasm Recurrence
- Neoplasms