

Rabbit MBD4 Polyclonal Antibody | anti-MBD4 antibody

MBD4 antibody - middle region

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA197885	Rabbit	Guinea Pig, Human	Western Blot, Chromatin Immunoprecipitation, Immunoprecipitation

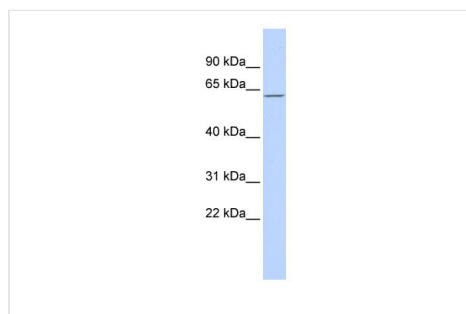
PRODUCT SYNONYMS

MBD4; Polyclonal Antibody; MBD4 antibody - middle region; anti-MBD4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Guinea Pig, Human
Clonality	Polyclonal
Purity/Purification	Affinity Purified
Form/Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Sequence	Synthetic peptide with the following sequence: CS EQKTSGLINK FCSAKDSEHN EKYEDTFLES EEIGTKVEVV ERKEHLHT
Sequence Length	580
Applicable Applications for anti-MBD4 antibody	WB (Western Blot), ChIP (Chromatin immunoprecipitation)
Homology	Guinea Pig: 83%; Human: 100%
Immunogen	The immunogen is a synthetic peptide directed towards the middle region of human MBD4
Preparation and Storage	For short term use, store at 2-8 degree C up to 1 week. For long term storage, store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

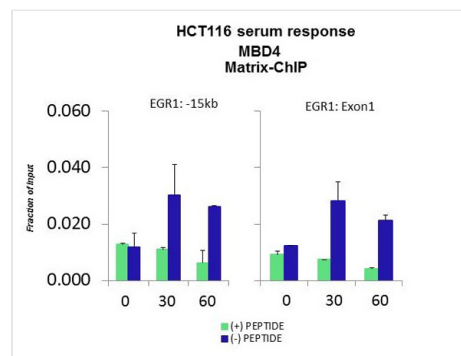
IMAGES



WB (Western Blot)

WB Suggested Anti-MBD4 Antibody Titration: 0.2-1 ug/mL ELISA Titer: 1:12500

Control: HeLa cell lysate MBD4 is strongly supported by BioGPS gene expression data to be expressed in Human HeLa cells



ChIP (Chromatin Immunoprecipitation)

Quiescent human colon carcinoma HCT116 cultures were treated with 10% FBS for three time points (0, 15, 30min) or (0, 30, 60min) were used in Matrix-ChIP and real-time PCR assays at EGR1 gene (Exon1) and 15kb upstream site.

ADDITIONAL INFORMATION

Related Product Information for anti-MBD4 antibody	This is a rabbit polyclonal antibody against MBD4. It was validated on Western Blot using a cell lysate as a positive control. Target Description: MBD4 is involved with DNA methylation. DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD3 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. MBD4 may function to mediate the biological consequences of the methylation signal. In addition, MBD4 has protein sequence similarity to bacterial DNA repair enzymes and thus may have some function in DNA repair. Further, MBD4 gene mutations are detected in tumors with primary microsatellite-instability (MSI), a form of genomic instability associated with defective DNA mismatch repair, and MBD4 gene meets 4 of 5 criteria of a bona fide MIS target gene. 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. MBD4 may function to mediate the biological consequences of the methylation signal. In addition, MBD4 has protein sequence similarity to bacterial DNA repair enzymes and thus may have some function in DNA repair. Further, MBD4 gene mutations are detected in tumors with primary microsatellite-instability (MSI), a form of genomic instability associated with defective DNA mismatch repair, and MBD4 gene meets 4 of 5 criteria of a bona fide MIS target gene. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.
Product Categories/Family for anti-MBD4 antibody	Polyclonal; Transcription Factor; Chromatin & Nuclear Signaling; Developmental Biology; Signal Transduction; Epigenetics; DNA Damage & Repair; Disease Related; DNA/RNA/Protein Interactions; DNA Repair

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505121
NCBI GeneID	8930
NCBI Accession #	NP_003916
NCBI GenBank Nucleotide #	NM_003925
UniProt Accession #	O95243
Molecular Weight	66kDa
NCBI Official Full Name	methyl-CpG-binding domain protein 4 isoform 1
NCBI Official Synonym Full Names	methyl-CpG binding domain 4, DNA glycosylase
NCBI Official Symbol	MBD4
NCBI Official Synonym Symbols	MED1
NCBI Protein Information	methyl-CpG-binding domain protein 4
UniProt Protein Name	Methyl-CpG-binding domain protein 4
UniProt Gene Name	MBD4
UniProt Synonym Gene Names	MED1
UniProt Entry Name	MBD4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.