

## Product datasheet for **TA338199**

### **MBD4 Rabbit Polyclonal Antibody**

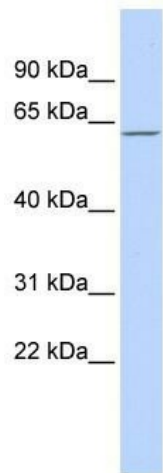
#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Applications:</b>	WB
<b>Recommended Dilution:</b>	WB, assay
<b>Reactivity:</b>	Human
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Clonality:</b>	Polyclonal
<b>Immunogen:</b>	The immunogen for anti-MBD4 antibody: synthetic peptide directed towards the middle region of human MBD4. Synthetic peptide located within the following region: CSEQKTSGIINKFCSAKDSEHNEKYEDTFLESEEIGTKVEVVERKEHLHT
<b>Formulation:</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Purification:</b>	Affinity Purified
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	66 kDa
<b>Gene Name:</b>	methyl-CpG binding domain 4, DNA glycosylase
<b>Database Link:</b>	<a href="#">NP_003916</a> <a href="#">Entrez Gene 8930 Human</a> <a href="#">O95243</a>

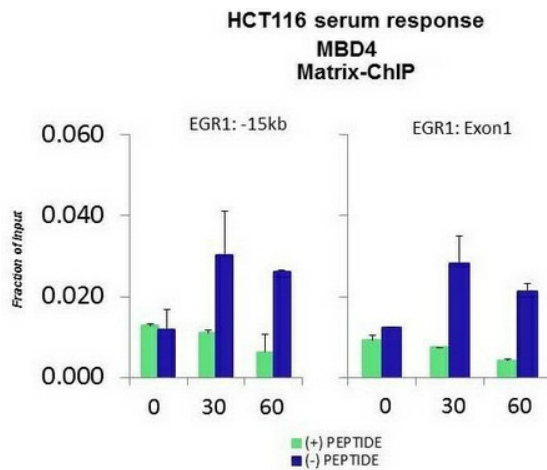


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<b>Background:</b>	<p>MBD4 is involved with DNA methylation. DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD3 comprise a family of 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.</p>
<b>Synonyms:</b>	MED1
<b>Note:</b>	Immunogen Sequence Homology: Human: 100%; Pig: 83%; Guinea pig: 83%
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Base excision repair

**Product images:**


WB Suggested Anti-MBD4 Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1:12500; Positive Control: Hela cell lysate MBD4 is strongly supported by BioGPS gene expression data to be expressed in Human HeLa cells



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.