

## Product datasheet for **TA347239**

### MBD1 Rabbit Polyclonal Antibody

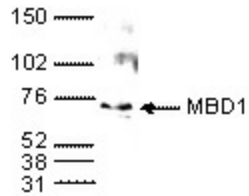
#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	ChIP (1.5 µg); ELISA (1:1,000); Western blotting (1:500)
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-MBD1 antibody: human MBD1 (Methyl-CpG-binding domain protein 1), using a KLH-conjugated synthetic peptide containing a sequence from the N-terminal part of the protein.
Concentration:	lot specific
Purification:	Affinity purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	methyl-CpG binding domain protein 1
Database Link:	<a href="#">NP_056669</a> <a href="#">Entrez Gene 4152 Human</a> <a href="#">Q9UIS9</a>
Background:	MBD1 (UniProt/Swiss-Prot entry Q9UIS9) 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.
Synonyms:	CXXC3; PCM1; RFT
Protein Families:	Druggable Genome, Transcription Factors

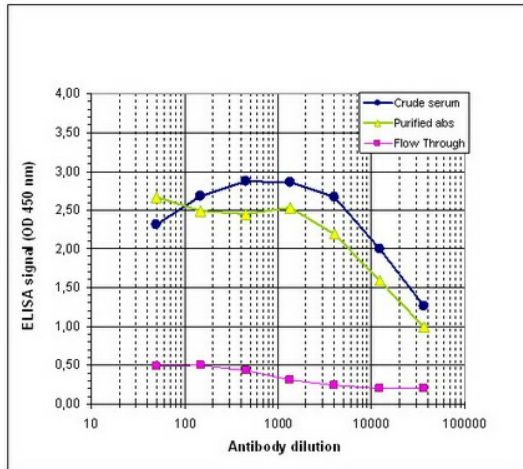


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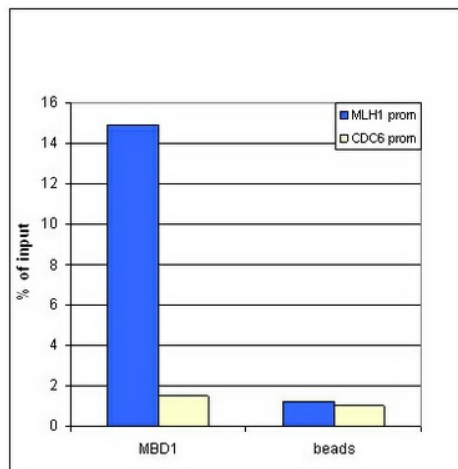
## Product images:



WB using the antibody against MBD1 diluted 1:500 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right, the marker (in kDa) is shown on the left.



**Determination of the antibody titer** To determine the titer of the antibody, an ELISA was performed using a serial dilution of the antibody against human MBD1, crude serum and Flow Through. The plates were coated with the peptide used for immunization of the rabbit. By plotting the absorbance against the antibody dilution (Figure 2), the titer of the purified antibody was estimated to be 1:20,000.



ChIP assays were performed using human osteosarcoma (U2OS) cells, the ab against MBD1 and optimized PCR primer sets. Sheared chromatin from  $1 \times 10^6$  cells and 1.5  $\mu$ g of antibody were used per ChIP experiment. Beads only were negative IP control. qPCR was performed with primers for the promoters of the MLH1 gene (positive control) and CDC6 gene (negative control). Image shows the recovery, expressed as a % of input (the relative amount of IP'd DNA compared to input DNA after qPCR analysis).