

**MBD3 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13755a****Specification**

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**MBD3 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O95983</a>
Other Accession	<a href="#">O9Z2D8</a> , <a href="#">NP_003917.1</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	32844
Antigen Region	1-30

**MBD3 Antibody (N-term) - Additional Information****Gene ID** 53615**Other Names**

Methyl-CpG-binding domain protein 3, Methyl-CpG-binding protein MBD3, MBD3

**Target/Specificity**

This MBD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human MBD3.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MBD3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MBD3 Antibody (N-term) - Protein Information****Name** MBD3

**Function** Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:[12124384](#), PubMed:[16428440](#), PubMed:[28977666](#)). Acts as transcriptional repressor and plays a role in gene silencing (PubMed:[10947852](#), PubMed:[18644863](#)). Does not bind to methylated DNA by itself (PubMed:[12124384](#), PubMed:[16428440](#)). Binds to a lesser degree DNA containing unmethylated CpG dinucleotides (PubMed:[24307175](#)). Recruits histone deacetylases and DNA methyltransferases.

#### **Cellular Location**

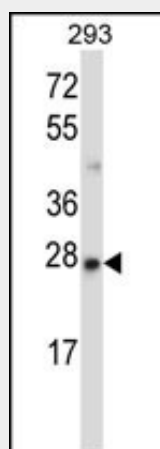
Nucleus. Chromosome. Note=Nuclear, in discrete foci. Detected on chromatin, at promoter regions of active genes

#### **MBD3 Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **MBD3 Antibody (N-term) - Images**



MBD3 Antibody (N-term) (Cat. #AP13755a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the MBD3 antibody detected the MBD3 protein (arrow).

#### **MBD3 Antibody (N-term) - Background**

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). However, unlike the other family members, MBD3 is not capable of binding to methylated DNA. The predicted MBD3 protein shares 71% and 94% identity with MBD2 (isoform 1) and mouse Mbd3. MBD3 is a subunit of the NuRD, a multisubunit complex containing nucleosome remodeling and histone deacetylase

activities. MBD3 mediates the association of metastasis-associated protein 2 (MTA2) with the core histone deacetylase complex.

#### **MBD3 Antibody (N-term) - References**

Bachmann, N., et al. Eur J Med Genet 53(1):23-24(2010)  
Noh, E.J., et al. Biochem. Biophys. Res. Commun. 378(3):332-337(2009)  
Morey, L., et al. Mol. Cell. Biol. 28(19):5912-5923(2008)  
Brown, S.E., et al. Gene 420(2):99-106(2008)  
Spensberger, D., et al. Biochemistry 47(24):6418-6426(2008)