

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

MBD3 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O95983
Other Accession	O9Z2D8 , NP_003917.1
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

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:[16428440](#), 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

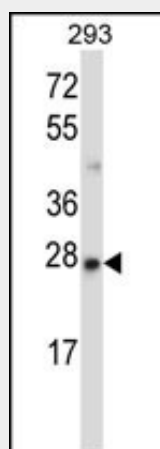
Nucleus. Chromosome. Note=Nuclear, in discrete foci. Detected on chromatin, at promoter regions of active genes

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)