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MBD3 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13755a

Specification

MBD3 Antibody (N-term) Blocking peptide - Product Information

Primary Accession O95983

MBD3 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 53615

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13755a was selected from the N-term region of MBD3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MBD3 Antibody (N-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- Blocking Peptides

MBD3 Antibody (N-term) Blocking peptide - Images

MBD3 Antibody (N-term) Blocking peptide - Background

DNA methylation is the major modification of eukaryoticgenomes and plays an essential role in mammalian development. Humanproteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family ofnuclear proteins related by the presence in each of a methyl-CpGbinding domain (MBD). However, unlike the other family members,MBD3 is not capable of binding to methylated DNA. The predictedMBD3 protein shares 71% and 94% identity with MBD2 (isoform 1) andmouse Mbd3. MBD3 is a subunit of the NuRD, a multisubunit complexcontaining nucleosome remodeling and histone deacetylaseactivities. MBD3 mediates the association of metastasis-associatedprotein 2 (MTA2) with the core histone deacetylase complex.

MBD3 Antibody (N-term) Blocking peptide - 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)