

MBD1 Blocking Peptide

Catalog # PBV10120b

Specification

MBD1 Blocking Peptide - Product Information

Primary Accession	<u>Q9UIS9</u>
Gene ID	4152
Calculated MW	66607

MBD1 Blocking Peptide - Additional Information

Gene ID 4152

Application & Usage

The peptide is used for blocking the antibody activity of MBD1. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

Other Names

Methyl-CpG-binding domain protein 1, CXXC-type zinc finger protein 3, Methyl-CpG-binding protein MBD1, Protein containing methyl-CpG-binding domain 1, MBD1, CXXC3, PCM1

Target/Specificity MBD1

Formulation 50 μ g (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions MBD1 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

MBD1 Blocking Peptide - Protein Information

Name MBD1 (<u>HGNC:6916</u>)

Synonyms CXXC3, PCM1

Function

Transcriptional repressor that binds CpG islands in promoters where the DNA is methylated at



position 5 of cytosine within CpG dinucleotides. Binding is abolished by the presence of 7-mG that is produced by DNA damage by methylmethanesulfonate (MMS). Acts as transcriptional repressor and plays a role in gene silencing by recruiting ATF7IP, which in turn recruits factors such as the histone methyltransferase SETDB1. Probably forms a complex with SETDB1 and ATF7IP that represses transcription and couples DNA methylation and histone 'Lys-9' trimethylation. Isoform 1 and isoform 2 can also repress transcription from unmethylated promoters.

Cellular Location

Nucleus. Nucleus matrix. Nucleus speckle Chromosome Note=Nuclear, in a punctate pattern (PubMed:12711603). Associated with euchromatic regions of the chromosomes, with pericentromeric regions on chromosome 1 and with telomeric regions from several chromosomes (PubMed:10648624, PubMed:10454587).

Tissue Location Widely expressed..

MBD1 Blocking Peptide - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MBD1 Blocking Peptide - Images