## MBD3 antibody (mAb)



Catalog No: 39216

RRID: AB\_2615024 Clone: 106B691 Application(s): WB Reactivity: Human Quantity: 100 µg

**Purification:** Affinity Purified

Host: Mouse Isotype: IgG

Concentration: 1 μg/μl Molecular Weight: 50 kDa

Background: MBD3 (methyl-CpG binding domain protein 3) is a subunit of the NuRD, a multi-subunit complex containing nucleosome remodeling and histone deacetylase activities. Methylation of mammalian DNA has long been recognized to play a major role in a number of cellular functions such as development and control of gene expression. It is generally associated with the repressive chromatin state. The complex series of events leading to this repressive state involve the coordinated regulation of DNA methyltransferases and two other groups of proteins called the Methyl-CpG binding proteins (MBD proteins) and the Kaiso family of proteins. The MBD family of proteins include MeCP2, MBD1, MBD2, MBD3 and MBD4. MBD3 regulates transcription by forming a Mi-2/NuRD complex with nucleosome remodeling and histone deacetylase (HDAC) activities in mammalian cells. MBD3 has been shown to interact not with 5-methylcytidine methylated DNA but with DNA containing 5-hydroxymethylcytosine (5-hmC) methylation. MDB3 colocalizes with TET1 and is required for normal levels of 5-hmC in embryonic stem cells.

**Immunogen:** This MBD3 antibody was raised against a synthetic peptide corresponding to human MBD3.

**Buffer:** PBS containing 0.02% sodium azide. Sodium azide is highly toxic.

## **Application Notes:**

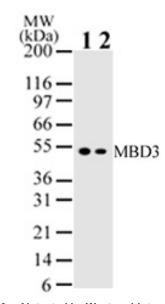
Applications Validated by Active Motif:

WB: 1 - 2 µg/ml dilution

For optimal results, primary antibody incubations should be performed at room temperature. The addition of 0.1% Tween 20 to all blocking solutions may also reduce background. Individual optimization may be required.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Store at 4°C for short term. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



MBD3 mAb tested by Western blot.
The analysis was performed using HeLa whole-cell extract and MBD3 mAb at 2 μg/ml (lane 1) and a 1 μg/ml (lane 2) dilutions.