

## 10-7007-F: Monoclonal Antibody to MBD1 (Clone: ABM15H2) FITC Conjugated

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	ABM15H2
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	FITC
<b>Gene :</b>	MBD1
<b>Gene ID :</b>	4152
<b>Uniprot ID :</b>	Q9UIS9
<b>Format :</b>	Purified
<b>Alternative Name :</b>	MBD1,CXXC3,PCM1
<b>Isotype :</b>	Mouse IgG1 Kappa
<b>Immunogen Information :</b>	A partial length recombinant MBD1 protein (amino acids 291-586) was used as the immunogen for this antibody.

### Description

MBD1 (Methyl-CpG-Binding Domain Protein 1) protein is a primary candidate for the readout of DNA methylation as it recruits chromatin remodelers, histone deacetylases and methylases to methylated DNA associated with gene repression. This protein, a member of a transcriptional repressor family MBD, is predominantly expressed in neurons. MBD protein binding requires both functional MBD domains and methyl-CpGs; however, some MBD proteins also bind unmethylated DNA and active regulatory regions via alternative regulatory domains or interaction with the NuRD/Mi-2 (Nucleosome Remodeling Deacetylase) complex members. The CXXC3 domain of MBD1 makes it a unique member of the MBD family due to its affinity to unmethylated DNA. MBD1 acts as an epigenetic regulator via different mechanisms, such as the formation of the MCAF1/MBD1/SETDB1 complex or the MBD1-HDAC3 complex. It also plays an important role in disease progression, contributes to the drug resistance of PC cells; however, the mechanism underlying the drug resistance endowed by MBD1 remains unknown.

### Product Info

<b>Amount :</b>	100 µg
<b>Purification :</b>	Protein G Chromatography
<b>Content :</b>	25 µg in 125 µl/100 µg in 500 µl Tris and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months.

### Application Note

FACS: 0.5-2 µg/10<sup>6</sup> cells

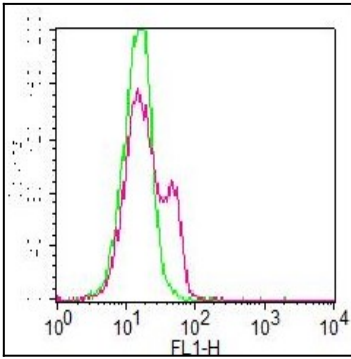


Fig-1: Intracellular FLOW staining of PMA treated Jurkat cells using 0.5  $\mu\text{g}$  of antibody. Green represents FITC conjugated isotype control (Abeomics). Red represents FITC conjugated MBD1 (10-7007-F).