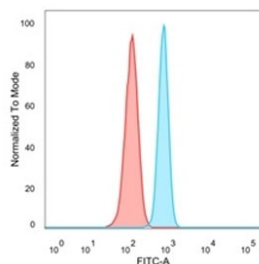


MBD3 Antibody [clone PCRP-MBD3-1C4] (V9207)

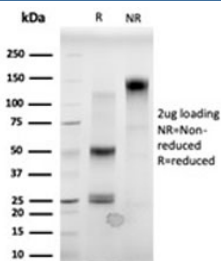
Catalog No.	Formulation	Size
V9207-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9207-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9207SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	PCRP-MBD3-1C4
Purity	Protein A/G affinity
UniProt	O95983
Localization	Nucleus
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This MBD3 antibody is available for research use only.

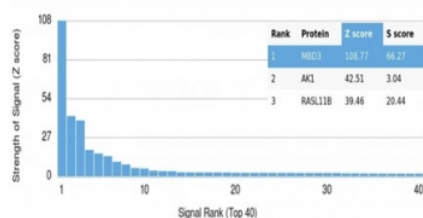


FACS staining of PFA-fixed human HeLa cells with MBD3 antibody (blue, clone PCRP-MBD3-1C4), and unstained cells (red).



SDS-PAGE analysis of purified, BSA-free MBD3 antibody (clone PCR-P-MBD3-1C4) as confirmation of integrity and purity.

Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using MBD3 antibody (clone PCR-P-MBD3-1C4). These results demonstrate the foremost specificity of the PCR-P-MBD3-1C4 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Methylation of DNA contributes to the regulation of gene transcription in both mammalian and invertebrate systems. DNA methylation predominates on cytosine residues that are present in dinucleotide motifs consisting of a 5' cytosine followed by a 3' guanine (CpG). They include methyl-CpG binding protein 1 (MBD1), MBD2, MBD3, MBD4 and MeCP2. Expression of the MBD proteins is highest in somatic tissues. MBD1 binds in a context specific manner to methyl-CpG rich domains and, in turn, mediates the transcriptional inhibition that is commonly observed with DNA methylation. Similarly, MBD2 inhibits transcription of methylated genes by associating with histone deacetylase (HDAC1) within the MeCP1 repressor complex. In addition, MBD4, which is also designated MED1, associates with the mismatch repair protein MLH1 and preferentially binds to methylated cytosine residues in mismatched base pairs. MeCP2 binds tightly to chromosomes in a methylation-dependent manner and associates with a corepressor complex containing the transcriptional repressor mSin3A and histone deacetylases. MeCP2 binds tightly to chromosomes in a methylation-dependent manner and associates with a corepressor complex containing the transcriptional repressor mSin3A and histone deacetylases.

Application Notes

Optimal dilution of the MBD3 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human MBD3 protein was used as the immunogen for the MBD3 antibody.

Storage

Aliquot the MBD3 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.

