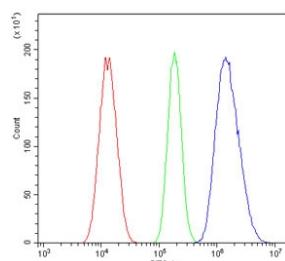


MBD1 Antibody (RQ5826)

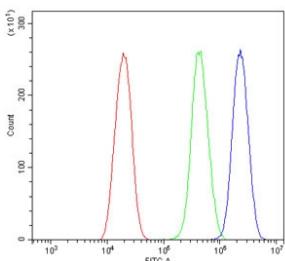
Catalog No.	Formulation	Size
RQ5826	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

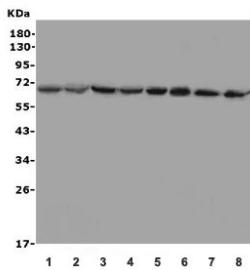
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q9UIS9
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This MBD1 antibody is available for research use only.



Flow cytometry testing of human A549 cells with MBD1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MBD1 antibody.



Flow cytometry testing of human U-2 OS cells with MBD1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MBD1 antibody.



Western blot testing of human 1) Jurkat, 2) HeLa, 3) HEK293, 4) HepG2, 5) U-2 OS, 6) rat thymus, 7) mouse thymus and 8) mouse SP2/0 lysate with MBD1 antibody. Predicted molecular weight ~67 kDa.

Description

MBD1 (Methyl-CpG-Binding Domain Protein 1), also known as PCM1 or CXXC3, is a protein that in humans is encoded by the MBD1 gene. Using PCR on a hybrid panel and FISH, Hendrich et al.(1999) mapped the MBD1 gene to chromosome 18q21, 2.1 cM distal to MBD2. Using yeast 2-hybrid analysis, reciprocal immunoprecipitation analysis, and protein pull-down assays, Fujita et al.(2003) showed that MBD1 interacted directly with MCAF. Deletion analysis revealed that the C-terminal transcriptional repressor domain(TRD) of MBD1 interacted with a conserved C-terminal domain of MCAF. Reporter gene assays showed that MCAF increased the repressive function of the isolated TRD of MBD1 against SP1. Chromatin immunoprecipitation analysis revealed that MBD1 linked MCAF to methylated promoters. Uchimura et al.(2006) found that MBD1 was multiply sumoylated in HeLa cells. Sumoylation did not alter the intracellular localization of MBD1 at nuclear foci in C-33A human cervical cancer cells.

Application Notes

Optimal dilution of the MBD1 antibody should be determined by the researcher.

Immunogen

Amino acids DLTDFDKQGILCYPAPKAHPVAVASKKRK from the human protein were used as the immunogen for the MBD1 antibody.

Storage

After reconstitution, the MBD1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.