# For Research Use Only

# MBD1 Polyclonal antibody

Catalog Number: 29998-1-AP



**Purification Method:** 

WB 1:1000-1:8000 IF/ICC 1:400-1:1600

Antigen affinity purification

Recommended Dilutions:

**Basic Information** 

Catalog Number: 29998-1-AP Size: 350 µ g/ml

Source: UNIPROT ID:
Rabbit Q9UIS9
Isotype: Full Name:

gG methyl-CpG binding domain protein 1

Immunogen Catalog Number: Calculated MW:

AG31424 67KD

Observed MW: 70-80 kDa

NM\_015846

4152

GeneID (NCBI):

GenBank Accession Number:

**Applications** 

Tested Applications: WB, IF/ICC, ELISA Species Specificity:

human

Positive Controls:

WB: HeLa cells, Jurkat cells

IF/ICC: HeLa cells, MCF-7 cells

### **Background Information**

MBD1, also known as RFT, PCM1, CXXC3, is a member of a family of nuclear proteins related by the presence of a methyl-CpG binding domain (MBD). MBD1 is a transcriptional repressor that binds CpG islands in promoters where the DNA is methylated at position 5 of cytosine within CpG dinucleotides. MBD1 acts as a transcriptional repressor and plays a role in gene silencing by recruiting AFT7IP, which in turn recruits factors such as the histone methyltransferase SETDB1. Five transcript variants of the MBD1 are generated by alternative splicing resulting in protein isoforms that contain one MBD domain, two to three cysteine-rich (CXXC) domains, and some differences in the COOH terminus. Isoform 1 and isoform 2 can repress transcription from unmethylated promoters (PMID: 12665582, 14610093, 16757475).

#### Storage

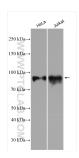
Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

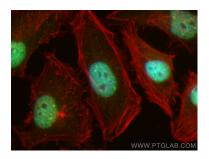
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

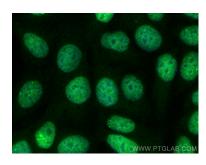
# **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 29998-1-AP (MBD1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MBD1 antibody (29998-1-AP) at dilution of 1:800 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using MBD1 antibody (29998-1-AP) at dilution of 1:800 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).