

**Anti-MBD3 Rabbit Monoclonal Antibody**  
Catalog # ABO16053

**Specification**

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**Anti-MBD3 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC
Primary Accession	<a href="#">O95983</a>
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-MBD3 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

**Anti-MBD3 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 53615

**Other Names**

Methyl-CpG-binding domain protein 3, Methyl-CpG-binding protein MBD3, MBD3

**Calculated MW**

33, 34, 36 kDa KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human MBD3

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-MBD3 Rabbit Monoclonal Antibody - Protein Information**

**Name** MBD3

### Function

Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed: [12124384](http://www.uniprot.org/citations/12124384), PubMed: [16428440](http://www.uniprot.org/citations/16428440), PubMed: [28977666](http://www.uniprot.org/citations/28977666)). Acts as transcriptional repressor and plays a role in gene silencing (PubMed: [10947852](http://www.uniprot.org/citations/10947852), PubMed: [18644863](http://www.uniprot.org/citations/18644863)). Does not bind to methylated DNA by itself (PubMed: [12124384](http://www.uniprot.org/citations/12124384), PubMed: [16428440](http://www.uniprot.org/citations/16428440)). Binds to a lesser degree DNA containing unmethylated CpG dinucleotides (PubMed: [24307175](http://www.uniprot.org/citations/24307175)). Recruits histone deacetylases and DNA methyltransferases.

### Cellular Location

Nucleus. Chromosome. Note=Nuclear, in discrete foci. Detected on chromatin, at promoter regions of active genes

### Anti-MBD3 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-MBD3 Rabbit Monoclonal Antibody - Images

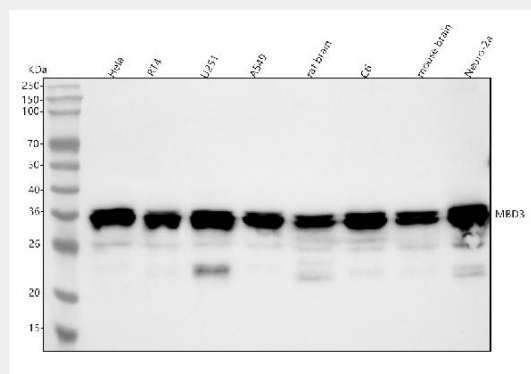


Figure 1. Western blot analysis of MBD3 using anti-MBD3 antibody (M02571-3).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,  
 Lane 2: human RT4 whole cell lysates,  
 Lane 3: human U251 whole cell lysates,  
 Lane 4: human A549 whole cell lysates,

Lane 5: rat brain tissue lysates,  
Lane 6: rat C6 whole cell lysates,  
Lane 7: mouse brain tissue lysates,  
Lane 8: mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MBD3 antigen affinity purified monoclonal antibody (Catalog # M02571-3) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MBD3 at approximately 33, 34, 36 kDa. The expected band size for MBD3 is at 33 kDa.

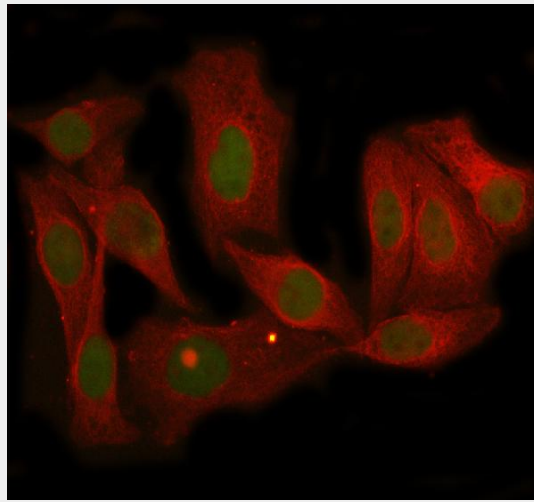


Figure 2. IF analysis of MBD3 using anti-MBD3 antibody (M02571-3) and anti-Beta Tubulin antibody (M01857-3).

MBD3 was detected in immunocytochemical section of HeLa cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated at 1:50 with rabbit anti-MBD3 Antibody (M02571-3) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) and Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.