

Datasheet for ABIN2779675  
**anti-MBD2 antibody (N-Term)**[Go to Product page](#)

3 Images

1 Publication

## Overview

Quantity:	100 µL
Target:	MBD2
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MBD2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

## Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human MBD2
Sequence:	RAHPGGGRCC PEQEEGESAA GGSGAGGDSA IEQGGQGSAL APSPVSGVRR
Predicted Reactivity:	Human: 100%, Mouse: 100%, Rat: 100%
Characteristics:	This is a rabbit polyclonal antibody against MBD2. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

## Target Details

Target:	MBD2
Alternative Name:	MBD2 ( <a href="#">MBD2 Products</a> )

## Target Details

Background:	<p>MBD2 belongs to a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). Each of these proteins, with the exception of MBD3, is capable of binding specifically to methylated DNA. MBD2 can also repress transcription from methylated gene promoters. MBD2 may function as a mediator of the biological consequences of the methylation signal. It is also reported that the MBD2 functions as a demethylase to activate transcription, as DNA methylation causes gene silencing. DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). Each of these proteins, with the exception of MBD3, is capable of binding specifically to methylated DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promoters. The protein encoded by this gene may function as a mediator of the biological consequences of the methylation signal. It is also reported that the this protein functions as a demethylase to activate transcription, as DNA methylation causes gene silencing. DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). Each of these proteins, with the exception of MBD3, is capable of binding specifically to methylated DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promoters. The protein encoded by this gene may function as a mediator of the biological consequences of the methylation signal. It is also reported that the this protein functions as a demethylase to activate transcription, as DNA methylation causes gene silencing.</p> <p>Alias Symbols: DKFZp586O0821, DMTase, NY-CO-41</p> <p>Protein Interaction Partner: UBC, SOX2, HDAC2, HDAC1, MTA3, LAMTOR3, TFAP4, KDM5B, CDK2AP1, ESR1, KDM1A, MTA2, MBD2, RBBP7, RBBP4, CHD3, tat, MBD3L2, MBD3, csul, GATAD2A, TACC3, PRMT5, WDR77, PRMT1, PTK2B, TRIM27, GATAD2B, MBD3L1, GPN1, SIN3A, HINFP, DHX9, CREBBP, DNMT1, tax, NEWENTR</p> <p>Protein Size: 302</p>
Molecular Weight:	32 kDa
Gene ID:	8932
NCBI Accession:	<a href="#">NM_015832</a> , <a href="#">NP_056647</a>
UniProt:	<a href="#">Q9UBB5</a>
Pathways:	<a href="#">Chromatin Binding</a>

## Application Details

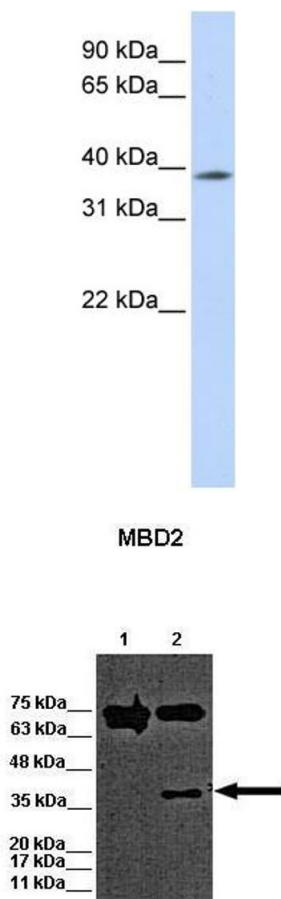
Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 302 AA
Restrictions:	For Research Use only

## Handling

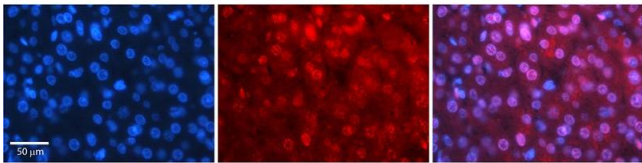
Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

## Publications

Product cited in:	Zhang, Muralimanoharan, Wortman, Mendelson: "Primate-specific miR-515 family members inhibit key genes in human trophoblast differentiation and are upregulated in preeclampsia." in: <b>Proceedings of the National Academy of Sciences of the United States of America</b> , (2016) ( <a href="#">PubMed</a> ).
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See Immunoblot 2 Data and Customer Feedback for more Information



### Western Blotting

**Image 1.** WB Suggested Anti-MBD2 Antibody Titration: 0.2-1 ug/ml ELISA Titer: 1:12500 Positive Control: 721\_B cell lysate MBD2 is strongly supported by BioGPS gene expression data to be expressed in Human 721\_B cells

### Western Blotting

**Image 2.** Lanes: Lane 1: 15ug WT mouse ES lysate Lane 2: 15ug MBD2 KO mouse ES lysate Primary Antibody Dilution: 1:1000 Secondary Antibody: Goat anti-rabbit-HRP Secondary Antibody Dilution: 1:2500 Gene Name: MBD2 a Submitted by: Austin J. Cooney, Baylor College of Medicine

### Immunohistochemistry

**Image 3.** Rabbit Anti-MBD2 Antibody Formalin Fixed Paraffin Embedded Tissue: Human Adult liver Observed Staining: Nuclear Primary Antibody Concentration: 1:100 Secondary Antibody: Donkey anti-Rabbit-Cy2/3 Secondary Antibody Concentration: 1:200 Magnification: 20X Exposure Time: 0.5 – 2.0 sec Protocol located in Reviews and Data.