10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MeCP2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2545b

Specification

MeCP2 Antibody (C-term) - Product Information

Application	**WB, FC,E**
Primary Accession	Q95LG8
Other Accession	Q9Z2D6, P51608
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**52427**
Antigen Region	**399-428**

MeCP2 Antibody (C-term) - Additional Information

Other Names
Methyl-CpG-binding protein 2, MeCp-2 protein, MeCp2, MECP2

Target/Specificity
This MeCP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 399-428 amino acids from the C-terminal region of human MeCP2.

Dilution
WB~~1:1000
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MeCP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MeCP2 Antibody (C-term) - Protein Information

Name MECP2

Function Chromosomal protein that binds to methylated DNA. It can bind specifically to a single methyl-CpG pair. It is not influenced by sequences flanking the methyl-CpGs. Mediates

transcriptional repression through interaction with histone deacetylase and the corepressor SIN3A. Binds both 5-methylcytosine (5mC) and 5-hydroxymethylcytosine (5hmC)- containing DNA, with a preference for 5-methylcytosine (5mC).

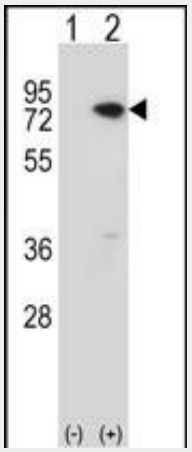
Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q9Z2D6}. Note=Colocalized with methyl-CpG in the genome. Colocalized with TBL1X to the heterochromatin foci. {ECO:0000250|UniProtKB:P51608}

MeCP2 Antibody (C-term) - Protocols

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

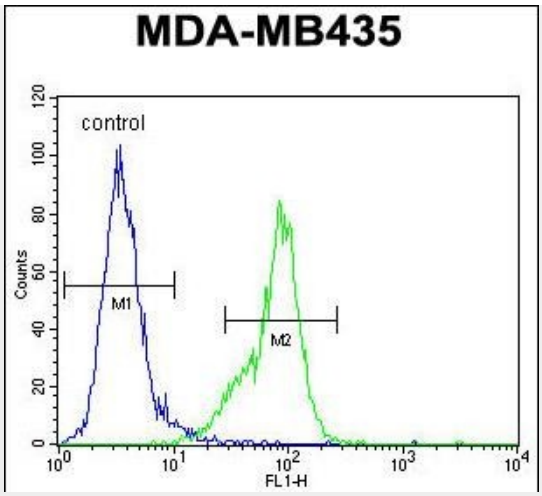
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MeCP2 Antibody (C-term) - Images



Western blot analysis of MeCP2 (arrow) using rabbit polyclonal MeCP2 Antibody (C413) (Cat. #AP2545b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the MeCP2 gene.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



MeCP2 Antibody (C-term) (Cat. #AP2545b) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MeCP2 Antibody (C-term) - Background

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. In contrast to other MBD family members, MECP2 is X-linked and subject to X inactivation. MECP2 is dispensible in stem cells, but is essential for embryonic development. MECP2 gene mutations are the cause of some cases of Rett syndrome, a progressive neurologic developmental disorder and one of the most common causes of mental retardation in females.

MeCP2 Antibody (C-term) - References

dos Santos, J.M., et al., Neurosci. Lett. 379(1):13-16 (2005).
Ylisaukko-Oja, T., et al., Am J Med Genet A 132(2):121-124 (2005).
Schanen, C., et al., Am J Med Genet A 126(2):129-140 (2004).
Shibayama, A., et al., Am. J. Med. Genet. B Neuropsychiatr. Genet. 128(1):50-53 (2004).
Fang, J.Y., et al., World J. Gastroenterol. 10(23):3394-3398 (2004).