

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 O9Z2D6, P51608

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region
Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
S2427
Antigen Region
399-428

MeCP2 Antibody (C-term) - Additional Information

Gene ID 102135563

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

E~~Use at an assay dependent concentration.

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

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}

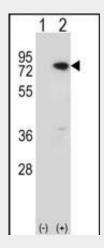
MeCP2 Antibody (C-term) - Protocols

preference for 5-methylcytosine (5mC).

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

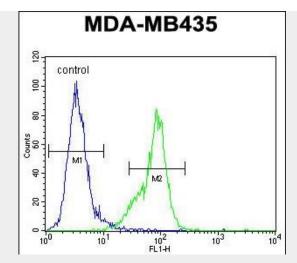
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.





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).