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MeCP2 Antibody (N-term S80) Blocking peptide
Synthetic peptide
Catalog # BP11975a

Specification

MeCP2 Antibody (N-term S80) Blocking peptide - Product Information

Primary Accession P51608

MeCP2 Antibody (N-term S80) Blocking peptide - Additional Information

Gene ID 4204

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MeCP2 Antibody (N-term S80) Blocking peptide - 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.

Tissue Location
Present in all adult somatic tissues tested.

MeCP2 Antibody (N-term S80) Blocking peptide - Protocols

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

- Blocking Peptides

MeCP2 Antibody (N-term S80) Blocking peptide - Images

MeCP2 Antibody (N-term S80) Blocking peptide - Background

DNA methylation is the major modification of eukaryoticgenomes and plays an essential role in mammalian development. Humanproteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family ofnuclear proteins related by the presence in each of a methyl-CpGbinding domain (MBD). Each of these proteins, with the exception ofMBD3, is capable of binding specifically to methylated DNA. MECP2,MBD1 and MBD2 can also repress transcription from methylated genepromoters. In contrast to other MBD family members, MECP2 isX-linked and subject to X inactivation. MECP2 is dispensible instem cells, but is essential for embryonic development. MECP2 genemutations are the cause of most cases of Rett syndrome, aprogressive neurologic developmental disorder and one of the mostcommon causes of mental retardation in females. [provided byRefSeq].

MeCP2 Antibody (N-term S80) Blocking peptide - References

Shapiro, J.R., et al. Pediatr. Res. 68(5):446-451(2010)Pintaudi, M., et al. Epilepsy Behav (2010) In press :Jain, D., et al. Pediatr. Neurol. 43(1):35-40(2010)Harvey, C.G., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 144B (3), 355-360 (2007) :Francke, U. Nat Clin Pract Neurol 2(4):212-221(2006)