



### MECP2 Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP13733a

### **Specification**

MECP2 Antibody (N-term) Blocking peptide - Product Information

Primary Accession P51608

MECP2 Antibody (N-term) Blocking peptide - Additional Information

**Gene ID 4204** 

#### **Other Names**

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

### **Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13733a was selected from the N-term region of MECP2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **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) Blocking peptide - Protein Information

Name MECP2

### **Function**

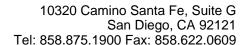
Chromosomal protein that binds to methylated DNA. It can bind specifically to a

## MECP2 Antibody (N-term) 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 of nuclear proteins related by the presence in each of a methyl-CpGbinding 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 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) 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)





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) Blocking peptide - Protocols

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

• Blocking Peptides