



## Human MECP2 peptide (DAG-P0841)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Antigen Description</b>	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 most cases of Rett syndrome, a progressive neurologic developmental disorder and one of the most common causes of mental retardation in females. [provided by RefSeq, Jul 2009]
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<b>Specificity</b>	Present in all adult somatic tissues tested.
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Contains 2 A.T hook DNA-binding domains.Contains 1 MBD (methyl-CpG-binding) domain.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

### GENE INFORMATION

<b>Gene Name</b>	<a href="#">MECP2 methyl CpG binding protein 2 (Rett syndrome) [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	MECP2

<b>Synonyms</b>	MECP2; methyl CpG binding protein 2 (Rett syndrome); RS; RTS; RTT; PPMX; MRX16; MRX79; MRXSL; AUTSX3; MRXS13; methyl-CpG-binding protein 2; meCp-2 protein;
<b>Entrez Gene ID</b>	<a href="#">4204</a>
<b>mRNA Refseq</b>	<a href="#">NM_001110792.1</a>
<b>Protein Refseq</b>	<a href="#">NP_001104262.1</a>
<b>UniProt ID</b>	P51608
<b>Chromosome Location</b>	Xq28
<b>Pathway</b>	SIDS Susceptibility Pathways, organism-specific biosystem;
<b>Function</b>	DNA binding; chromatin binding; double-stranded methylated DNA binding; mRNA binding; methyl-CpG binding; poly(A) RNA binding; protein N-terminus binding; protein binding; protein domain specific binding; sequence-specific DNA binding transcription factor