



MeCP2 Monoclonal Antibody

Catalog No	YP-mAb-03006
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	MECP2
Immunogen	Synthetic Peptide of MeCP2 AA range: 313-363
Specificity	The antibody detects endogenous MeCP2 proteins.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AUTSX3;MeCp 2 protein;MeCp-2 protein;Methyl CpG binding protein 2;Methyl-CpG-binding protein 2;MECP2;Methyl-CpG-binding protein 2 (MeCp-2 protein) (MeCp2)
Observed Band	53kD
Calculated Molecular Weight	53kD
Cell Pathway	Nucleus . Colocalized with methyl-CpG in the genome. Colocalized with TBL1X to the heterochromatin foci. .
Tissue Specificity	Present in all adult somatic tissues tested.
Function	disease:A chromosomal duplication involving MECP2 is the cause of mental retardation syndromic X-linked Lubs type (MRXSL) [MIM:300260]. Increased dosage of MECP2 appears to be responsible for the mental retardation phenotype. The main features present in affected males are severe to profound mental retardation with onset at birth, axial and facial hypotonia, progressive spasticity predominantly at the lower limbs, seizures and recurrent infections., disease:Defects in MECP2 are the cause of mental retardation syndromic X-linked type 13 (MRXS13) [MIM:300055]. Mental retardation is a mental disorder characterized by significantly sub-average general intellectual functioning



associated with impairments in adaptative behavior and manifested during the developmental period. MRXS13 patients manifest mental retardation associated with other variable features such as spasticity, episodes of manic

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 dispensable 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. Alternative splicing results in multiple transcript variants encoding different isoforms

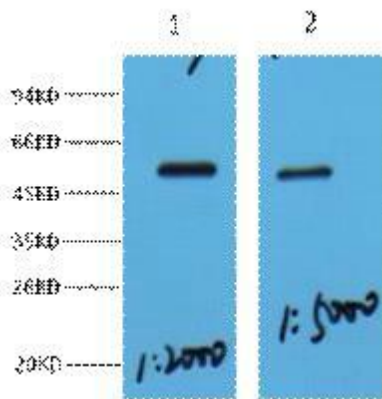
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using MeCP2 Monoclonal Antibody