

MECP2 Antibody

CATALOG NO.: 30-036

SPECIES REACTIVITY: H,M,R,D

ACCESSION NUMBER: NP_004983

BACKGROUND:

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. 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.

SOURCE:

Polyclonal antibody produced in rabbits immunized with a synthetic peptide corresponding to a region of Human MECP2.

PURIFICATION:

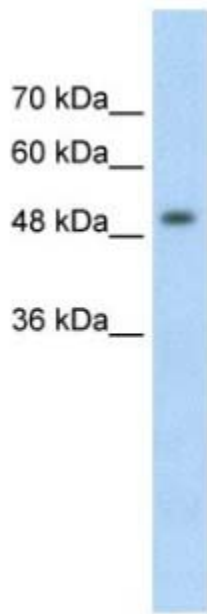
Rabbit IgG purified by protein A chromatography.

APPLICATION:

MECP2 antibody can be used for Western blot at a suggested dilution at 2.5µg/ml in 5% skim milk / PBS buffer, and HRP conjugated anti-Rabbit IgG should be diluted in 1: 50,000 - 100,000 as secondary antibody. Optimal dilutions/concentrations should be determined by the end user. The information provided is a guideline for product use. This antibody is for research use only.

STORAGE:

Antibody is lyophilized from PBS buffer with 2% sucrose. Add 100 µl of distilled water. Final antibody concentration is 1 mg/ml. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.



Western blot analysis of MECP2 expression in Jurkat cell lysate using MECP2 antibody 2.5 μ g/ml.