

## Recombinant Human MECP2 protein, His & T7-tagged

Cat. No. MECP2-7946H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human MECP2 aa. (Met1~Lys177 (Accession # P51608)) fused with N-terminal His & T7 tag was produced in E. coli cells.

**Species** Human

**Source** E.coli

**ProteinLength** Met1~Lys177

**Description** 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 cognitive disability in females. Alternative splicing results in multiple transcript variants encoding different isoforms.

**Form** Freeze-dried powder

**Molecular Mass** 30kDa as determined by SDS-PAGE reducing conditions.

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|                       |   |
|-----------------------|---|
| <b>Endotoxin</b>      | <1.0EU per 1ug (determined by the LAL method)   |
| <b>Purity</b>         | >90%  |
| <b>Characteristic</b> | The isoelectric point is 9.6.   |
| <b>Applications</b>   | SDS-PAGE; WB; ELISA; IP.  |
| <b>Stability</b>      | The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition. |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.  |
| <b>Storage Buffer</b> | Supplied as lyophilized form in 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and preservative.   |
| <b>Reconstitution</b> | Reconstitute in sterile ddH <sub>2</sub> O.   |

## GENE INFORMATION

|                        |  |
|------------------------|--|
| <b>Gene Name</b>       | MECP2 methyl-CpG binding protein 2 [ Homo sapiens (human) ]  |
| <b>Official Symbol</b> | MECP2  |
| <b>Synonyms</b>        | MECP2; methyl-CpG binding protein 2; RS; RTS; RTT; PPMX; MRX16; MRX79; MRXSL; AUTSX3; MRXS13; methyl-CpG-binding protein 2; meCp-2 protein; testis |

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tissue sperm-binding protein Li 41a

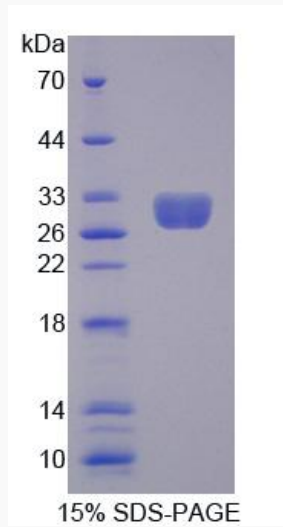
Gene ID 4204

mRNA Refseq NM\_001110792.1

Protein Refseq NP\_001104262.1

UniProt ID P51608

SDS-PAGE



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