

Product datasheet for RC202382L2

OriGene Technologies, Inc.

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MECP2 (NM_004992) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MECP2 (NM_004992) Human Tagged Lenti ORF Clone

Tag: mGFP
Symbol: MECP2

Synonyms: AUTSX3; MRX16; MRX79; MRXS13; MRXSL; PPMX; RS; RTS; RTT

Mammalian Cell None

Selection:

Vector:pLenti-C-mGFP (PS100071)E. coli Selection:Chloramphenicol (34 ug/mL)

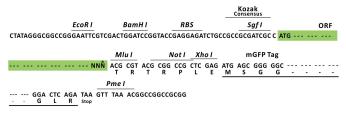
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC202382).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_004992

ORF Size: 1458 bp





MECP2 (NM_004992) Human Tagged Lenti ORF Clone - RC202382L2

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 004992.2</u>

RefSeq Size: 10182 bp RefSeq ORF: 1461 bp

Locus ID: 4204

UniProt ID: P51608
Cytogenetics: Xq28

Protein Families: Druggable Genome

MW: 52.3 kDa

Gene Summary: 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

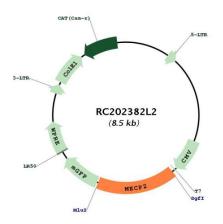
transcription from methylated gene promoters. In contrast to other MBD family members, MECP2 is X-linked and subject to X inactivation. MECP2 is dispensible in stem cells, but is essential for embryonic development. MECP2 gene mutations are the cause of most cases of Rett syndrome, a progressive neurologic developmental disorder and one of the most

common causes of cognitive disability in females. Alternative splicing results in multiple

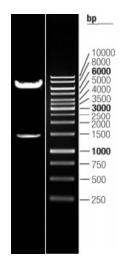
transcript variants encoding different isoforms. [provided by RefSeq, Oct 2015]



Product images:



Circular map for RC202382L2



Double digestion of RC202382L2 using Sgfl and Mlul $\,$