

Product datasheet for **RG202382**

MECP2 (NM_004992) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MECP2 (NM_004992) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MECP2
Synonyms:	AUTSX3; MRX16; MRX79; MRXS13; MRXSL; PPMX; RS; RTS; RTT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG202382 representing NM_004992
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTAGCTGGGATGTTAGGGCTCAGGGAAGAAAAGTCAGAAGACCAGGACCTCCAGGGCTCAAGGACA
 AACCCCTCAAGTTTAAAAAGGTGAAGAAAAGATAAGAAAAGAGAAAAGAGGGCAAGCATGAGCCCGTGCA
 GCCATCAGCCCACTCTGCTGAGCCCGCAGAGGCAGGCAAAGCAGAGACATCAGAAGGGTCAGGCTCC
 GCCCGGCTGTGCCGGAAGCTTCTGCTCCCCAAACAGCGGCGCTCCATCATCCGTGACCGGGACCCA
 TGTATGATGACCCACCTGCCTGAAGGCTGGACACGGAAGCTTAAGCAAAGGAAATCTGGCCGCTCTGC
 TGGGAAGTATGATGTGATTTGATCAATCCCCAGGAAAAGCCTTTCGCTCTAAAGTGGAGTTGATTGCG
 TACTTCGAAAAGGTAGGCGACACATCCCTGGACCCTAATGATTTTGACTTCACGGTAACTGGGAGAGGGA
 GCCCTCCCGGCGAGAGCAGAAACCACCTAAGAAGCCCAATCTCCAAAGCTCCAGGAACTGGCAGAGG
 CCGGGGACGCCCAAAGGGAGCGCACACGAGACCCAAGCGGCCACGTGAGAGGTGTGCAGGTGAAA
 AGGGTCTGGAGAAAAGTCTGGGAAGCTCCTGTCAAGATGCCTTTTCAAACCTTCGCCAGGGGGCAAGG
 CTGAGGGGGTGGGGCCACCACATCCACCAGGTGATGGTATCAACGCCCGGCGAGGAAGCGAAAAGC
 TGAGGCCGACCCTCAGGCCATTCCTCAAGAAACGGGGCCGAAAGCCGGGGAGTGTGGTGGCAGCCGCTGCC
 GCCGAGGCCAAAAGAAAGCCGTGAAGGAGTCTTCTATCCGATCTGTGCAGGAGACCGTACTCCCATCA
 AGAAGCGCAAGACCCGGGAGACGGTCAGCATCGAGGTCAAGGAAGTGGTGAAGCCCTGCTGGTGTCCAC
 CCTCGGTGAGAAGAGCGGAAAGGACTGAAGACCTGTAAGAGCCCTGGGCGGAAAAGCAAGGAGAGCAGC
 CCCAAGGGGCGCAGCAGCAGCGCCTCCTCACCCCAAGAAGGAGCACCACCACCATCACCACACTCAG
 AGTCCCCAAAGGCCCCCTGCCACTGCTCCCACCCCTGCCCCACCTCCACCTGAGCCCGAGAGCTCCGA
 GGACCCACAGCCCTGAGCCCGAGACTTGAGCAGCAGCGTCTGCAAAGAGGAGAAGATGCCCAGA
 GGAGGCTCACTGGAGAGCGAGCGCTGCCCAAGGAGCCAGCTAAGACTCAGCCCGCGTTGCCACCGCCG
 CCACGGCCGAGAAAAGTACAAACACCGAGGGGAGGGAGAGCGCAAAGACATTGTTTCATCTCCATGCC
 AAGGCCAAACAGAGAGGAGCCTGTGGACAGCCGGACGCCGTCGACCGAGAGAGTTAGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG202382 representing NM_004992
 Red=Cloning site Green=Tags(s)

MVAGMLGLREEKSEDQDLQGLKDKPLKFKKVKKDKKEEKEGKHEPVQPSAHHSAEPAEAGKAETSEGS
 APAPVEASAPKQRRSIIIRDRGPMYDDPTLPEGWTRKLRKSGRSAGKYDVYLINPQKAFRSKVELIA
 YFEKVGDTSLDPNDFDFVTGGRGSPSRREQPPKPKSPKAPGTGRGRGRPKGSGTTRPKAATSEGVQVK
 RVLEKSPGKLLVKMPFQTSPPGKAEGGATTSTQVMVIKRPGRKRKAEADPQAIPKKRGRKPGSVAAAA
 AEAKKAVKESSIRSVQETVLPPIKKRKTRETVSIEVKEVVKPLLVSTLGEKSGKGLKTCKSPGRKSKES
 PKGRSSSASSPPKKEHHHHHHHSESPKAPVLLPPLPPPPPEPESSDPTSPPEPQDLSSSVCKEEKMPR
 GGSLESDGCPKEPAKTQPAVATAATAAEKYKHRGEGERKDIVSSMPPRNREEPVDSRTPVTERVS

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_004992

ORF Size: 1458 bp

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: [NM_004992.4](#)

RefSeq Size: 10182 bp

RefSeq ORF: 1461 bp

Locus ID: 4204

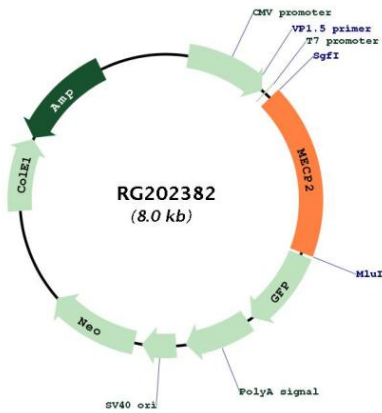
UniProt ID: [P51608](#)

Cytogenetics: Xq28

Protein Families: Druggable Genome

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 RG202382