

Product datasheet for **MG215235**

Epc1 (NM_027497) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Epc1 (NM_027497) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Epc1
Synonyms:	2400007E14Rik; 5730566F07Rik; A930032N02Rik; mir-1893
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG215235 representing NM_027497
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGTAAACTGTCGTTTCGGGCGGGGCTGGACGCCTCGAAGCCGCTGCCGGTCTTCCGCTGTGAGG
 ATCTGCCCGACCTGCACGAATACGCCTCGATAAACCGGGCCGTGCCGCAGATGCCACCGGGATGGAGAA
 GGAAGAGGAGTCGGAACACCATCTTCAGCGGGCTATTTCTGCACAGCAGGTGTACGGCGAGAAGCGGGAT
 AACATGGTTATTCCAGTTCCTGAAGCAGAGAGTAACATCGCTTACTATGAGTCCATATACCTGGGGAGT
 TCAGGATGCCAAAGCAGCTCATTACATACAGCCTTTTAGCTTGGACGCTGAACAGCCTGATTACGATCT
 GGATTCTGAAGATGAAGTATTTGTGAATAAACTGAAGAAGAAAATGGACATCTGCCATTGCAGTTTGAG
 GAGATGATTGACCGCTAGAAAAAGGCAGCGGTGACGAGCCAGTCACTGCAGGAAGCCAACTACTTC
 TAAAAGAAGATGATGAGTTAATTAGAGAAGTTTATGAATACTGGATTAAGAGAGGAAAACCTGCCGGG
 GTCATCACTTATCCCGTTGGTAAAACAGGAAAAGCGAGATGGTTCTAGCACAAATGATCCTTACGTGGCT
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 TAAGGCTGATCTTATCCGGCCGAAGCGCAAATATGAAAAGAAGCCCAAAGTCTTACCCCATCTGCTGCC
 CCCCTCAGCAGCAGAGTCTGCTGCACCTGCCAGGCTTCACTGCTAAAGACTTAAACCAGTACGACTTCC
 CCAGCTCAGATGAAGAGCCTGTGCACAGGTTTTGTCTGGCTCTTCGGAAGCTGAGGAAGAGAAAGACCC
 TGATGGCCCTTTTGGCTTCCGTAGGAAAAGCAGGCTGTCAGTACTATGCTCCTCATTAGACCAAACCTGGC
 AACTGGCCCTGGACTAGCCCTAAAGATGGAGGCCTGGGGGATGTGCGATATAGATATTGCTTAACTACTC
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 CAGAGCGCATTCACTATGACAGTATGTTTACCACCTGGATTGGACATGCTTTCCTCACCACAACCT
 TCTCCAGTCAATCAGTTTGCCAATACCTCAGAACCAATACCTCGGACAGATCTTCTCTAAAGACCTCA
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 CAGTGACAGTGGTGAACCTCCAGTAGAAAAGTTACACAGGAGTATCAGTCGAGCAGGAGCAGCACAGCCT
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 GCAGCAGCAAGCAATAGTAGTTCCTCTGCCGCGCGCAACAGGGTTTTGTTTCTAAGACGTTGGACTCT
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 CCCAATAAACGCACGGCATATACCTAGGACTTTAAGTGTCTGTTCCGCCATCTGCCTTAAAGCTGGCTGCT
 GCAGCAAATTGTCAAGTTTCCAAGTCCCCTCCTCATCCTCTGTAGATTCAAGTTCCAAGGAAAAATCATG
 AATCGAAAAAGCCAGCACTGAACAACATAGCAGACAACACAGTAGCAATGGAGGTGACG

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG215235 representing NM_027497
 Red=Cloning site Green=Tags(s)

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MSKLSFRARALDASKPLPVFRCELDPLHEYASINRAVPQMPTGMEKEEESHHLQRAISAQQVYGEKRD
NMVIPVPEAESNIAYYESIYPGEFRMPKQLIHIQPFSLDAEQPDYDLSEDEVFNKLLKKMDICPLQFE
EMIDRLEKGGGQPPVSLQEAKLLKEDDELIREVVEYWIKKRKTGRGSSLIPLVKQEKRDGSSNDPYVA
FRRRTEKMQTRKNRKNDEASYEKMLKRRDLRAVTILEMIKRREKSKRELLHLTLEIMEKRYNLGDYSG
EIMSEVMAQRQPVKPTYAIPPIITNSSQFKHQDATDSKEFKVKNQDKADLIRPKRKYKPKVLPSPAA
APQQQSPAALPGFSAKDLNQYDFPSSDEEPLSQVLSGSSEAEENDPDGPFAFRRKAGCQYYAPHLDQTG
NWPWTSPKDGGLGDVRYRYCLTTLTVPQRCLGFARRRVGRGGRVLDRAHSDYDSMFHHLDLMLSSPQP
SPVNQFANTSEPNTSDRSSKDLSQLVDIKSCRWRHFRPRTPSLPDSDSGELSSRKLHRSISRAGAAQP
GAHTCSTSTQNRSSGSAHCAFTAQYQQHQQLALMQQQLAQTQQQQANSSSSAAAQQGFVSKTLDS
ASAQFAASALMTSEQLLGFVKDDVVLGLGVNGVLPASGVYKGLHLSTTPTALVHTSPSTAGSTLLQPS
NITQTSGSHSSLHQVTAASSATTQVLFGNIRLTVPSSVPTVNSVTPINARHIPRTL SAVPPSALKLAA
AANCQVSKVPSSSVDSVPRENHESEKPALNNIADNTVAMEVT
  
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

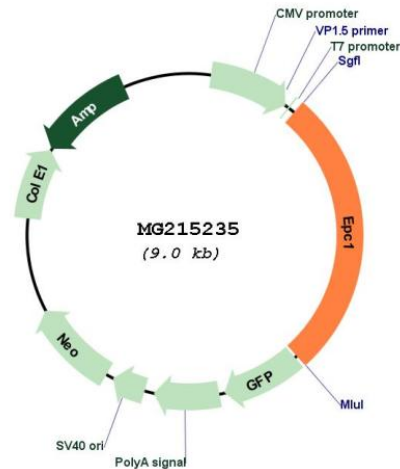
Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGGCCAGATCT

HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- --- ---
 T R T R P L E M E S D - - -

PmeI FseI
 --- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
 - - E E R V Stop

Plasmid Map:


ACCN: NM_027497

ORF Size: 2439 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_027497.3](#), [NP_081773.1](#)

RefSeq Size: 3983 bp

RefSeq ORF: 2442 bp

Locus ID: 13831

UniProt ID: [Q8C9X6](#)

Cytogenetics: 18 A1

Gene Summary:

Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when directly recruited to sites of DNA damage (By similarity).[UniProtKB/Swiss-Prot Function]