

Product datasheet for **MG210622**

Uhrf1 (BC022167) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Uhrf1 (BC022167) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Uhrf1
Synonyms:	ICBP90, RNF106
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG210622 representing BC022167
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGATCCAGTTTCGAACTATGGATGGGAAGGAGACCCACACCGTGAACCTCTCTGTCCAGTTGACCA
 AGGTGCAGGAGCTGAGGAAAAAGATTGAGGAAGTGTTCACGTGGAACCCCAACTGCAGAGACTCTTTTA
 CAGGGGCAAAACAGATGGAGGACGCCACACACTCTTCGATTATGATGTGCGCCTCAATGACACAATCCAG
 CTGCTCGTGCAGAGTCTGGCACTGCCTCTCAGTACAAAAGAACGGGACTCGGAGCTCTCAGACTCGG
 ACTCTGGCTATGGTGTGGTGCACAGTGAATCAGACAAGTCGTCACGCATGGTGAAGGGGACGTGAAGC
 GGATGACAAGACTGTGTGGGAGGACACGGACCTGGGGCTGTACAAGGTCAATGAGTATGTGGACGTGCGT
 GACAATATCTTCGGTGCATGGTTTGAGGCCAGGTGGTCCAGGTACAGAAGAGAGCCCTATCTGAGGACG
 AGCCCTGTAGCTCCAGTCCGTTAAGACCTCGGAGGATGACATCATGTACCATGTCAAGTATGATGACTA
 TCCAGAGCATGGAGTGGACATTGTCAAAGCCAAGAATGTCCGTGCTCGTCTCGCACTGTGATACCATGG
 GAGAACCTGGAGGTGGTTCAGGTGGTTCATGGCCAACTATAACGTGGACTACCCCAAGGAAACGCGGCTCT
 GGTATGATGTTGAGATCTGTAGGAAGCGCCAAACCAGGACGGCACGTGAGCTATACGGCAACATCAGGCT
 CTTGAATGACTCTCAGCTCAACAAGTGTCCGATCATGTTTGTGGATGAAGTCTTGATGATTGAGCTCCCT
 AAAGAGAGGAGGCTTTGATCGTAGCCCTCGCAACCCCTCCTGCCCTCCGGAACACAGGGAAGAGCG
 GCCATCTGCCGGTCTGCAAGGATGATGAAAACAAACCATGTGCAAGTGTGCTGCCACGTGTGTGG
 TGGGCGGAGGCTCCTGAGAAACAGCTGTTGTGTGATGAGTGTGACATGGCCTCCACCTGTACTGCCTG
 AAGCCACCGCTCACCTCTGTCCCCCTGAGCCGGAGTGGTACTGCCCAAGTGTGCGCACTGACTCAAGTG
 AGGTGGTACAAGCAGGGGAGAAGCTGAAGGAGAGCAAGAAGAAGGCGAAGATGGCATCAGCCACTCCCTC
 TCCCCGGCGGGACTGGGGCAAGGCATGGCATGTGTGGCCGCACACAGAGTGTACCATTGTGCCCGCC
 AACCACTTCGGGCCATCCCTGGTGTCCCTGTGGGCACCATGTGGCGCTTCAGAGTCCAGGTGAGT
 CCGGTGTGCATCGCCTCATGTGGCAGGCATCCATGGCCGGAGCAACGACGGTGCCTACTCATTGGTCTCT
 GGCTGGTGGCTATGAGGATGATGTGGACAATGGCAATTACTTCACATACACAGGGAGTGGTGGCCGAGAC
 CTCTCTGGCAACAAGCGTACAGCAGGCCAGTCTCTGACCAGAAGCTCACTAATAACAATAGGGCTCTGG
 CACTCAATTGCCACTCCCAATCAATGAGAAAGGTGCGGAGGCTGAAGACTGGCGCAAGGGAAGCCAGT
 GCGTGTGGTCCGGAACATGAAGGGCGGAAACACAGCAAGTACGCTCCTGCAGAGGGCAACCGCTATGAT
 GGCATCTACAAGGTGGTGAAGTACTGGCCAGAGAGAGGAAATCTGGCTCCTCGTGTGGCGTTATCTCC
 TTGACAGAGATGACACAGAGCCTGAGCCCTGGACCCGGGAGGGCAAGGACCGCACTCGACAGCTGGGGCT
 CACTATGCAGTACCCTGAAGGCTACTTGGAGGCCCTGGCTAACAAAGGAGAAGAGCAGGAAGCGCCCGGCC
 AAGGCCTTGGAGCAGGGACCCCTCATCTTCCAAGACAGGCAAAAGCAAGCAGAAGTCCACAGGGCCGACCC
 TCTCCAGCCCCGTGCCTTAAGAAGAGCAAGCTGGAGCCGTACACACTCTCAGAGCAGCAGGCTAACCT
 CATCAAAGAGGACAAGGGCAACGCCAAGCTGTGGGATGATGTGCTAACTTCACTTCAGGATGGGCCGTAC
 CAGATCTTCTGAGCAAGGTGAAAGAGGCTTCCAGTGCATCTGCTGCCAGGAGCTGGTGTCCGGCCAG
 TCACCACCGTGTGTCAGCACAACGTCTGTAAGGACTGTCTGGACAGGTCTTCCGGGCCAGGTGTTGAG
 CTGCCCCGCTGTGCTATGAGCTGGACCACAGCTCCCCAACCCGGGTGAACCAGCCCTTGACAGACCATT
 CTCAACCAGCTCTTCCCTGGCTATGGCAGCGGCCGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210622 representing BC022167
 Red=Cloning site Green=Tags(s)

```
MWIVQRTMDGKETHTVNSLSRLTKVQELRKKIEEVFHVPEQLQRLFYRGKQMEDGHTLFDYDVRNLNDTIQ
LLVVRQSLALPLSTKERDSELSDSDSGYGVGHSESDKSSSTHGEGAAEADKTVWEDTDLGLYKVNVEYDVR
DNIFGAWFEAQVVQVQKRALSEDEPCSSSAVKTSEDDIMYHVKYDDYPEHGVDIVKAKNVRARARTVIPW
ENLEVGQVVMANYNVDPYPRKRGFWYDVEICRKRQTRTARELYGNIRLLNDSQLNCRIMFVDEVLMIELP
KERRPLIASPSQPPPALRNTGKSGPSCRFCDDENKPCRKCACHVCGGREAPEKQLLCDECDMAFHLYCL
KPPLTSVPPEPEWYPCSCRTDSSEVVQAGEKLKESKKKAKMASATSSRRDWGKGMACVGRITTECTIVPA
NHFGPIPGVPGTMWRFRVQVSESGVHRPHVAGIHGRSNDGAYSLVLAGGYEDDNDNGNYFTYTGSGGRD
LSGNKRTAGQSSDQKL TNNRRLALNCHSPINEKGAEADWRQKGPVVRVNRMMKGGKHSKYAPAEGNRYD
GIYKVVKYWPERGKSGFLVWRYLLRRDDTEPEPWTRREGKDRTRQLGLTMQYPEGYLEALANKEKSRKRPA
KALEQGPSSSKTGKSKQKSTGPTLSSPRASKSKLEPYTLSEQQANLIKEDKGNAKLWDDVLTSLQDGPY
QIFLSKVKEAFQICCCQELVFRPVTTVCQHNVCCKDCLDRSFRAQVFSCPACRYELDHSSPTRVNPQLQTI
LNQLFPGYGSGR
```

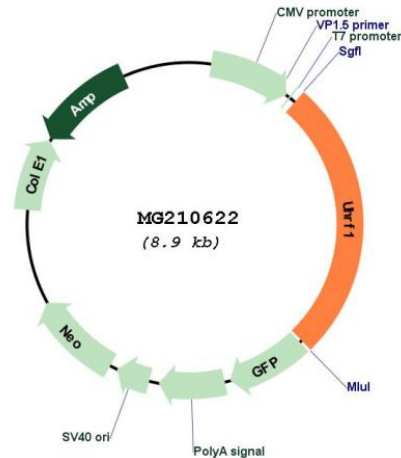
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: BC022167

ORF Size: 2348 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: [BC022167](#), [AAH22167](#)

RefSeq Size: 3555 bp

RefSeq ORF: 2348 bp

Locus ID: 18140

Cytogenetics: 17 D

Gene Summary:

Multidomain protein that acts as a key epigenetic regulator by bridging DNA methylation and chromatin modification. Specifically recognizes and binds hemimethylated DNA at replication forks via its YDG domain and recruits DNMT1 methyltransferase to ensure faithful propagation of the DNA methylation patterns through DNA replication. In addition to its role in maintenance of DNA methylation, also plays a key role in chromatin modification: through its tudor-like regions and PHD-type zinc fingers, specifically recognizes and binds histone H3 trimethylated at 'Lys-9' (H3K9me3) and unmethylated at 'Arg-2' (H3R2me0), respectively, and recruits chromatin proteins. Enriched in pericentric heterochromatin where it recruits different chromatin modifiers required for this chromatin replication. Also localizes to euchromatic regions where it negatively regulates transcription possibly by impacting DNA methylation and histone modifications. Has E3 ubiquitin-protein ligase activity by mediating the ubiquitination of target proteins such as histone H3 and PML. It is still unclear how E3 ubiquitin-protein ligase activity is related to its role in chromatin in vivo. May be involved in DNA repair.[UniProtKB/Swiss-Prot Function]