OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG211155

Chaf1a (NM_013733) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Chaf1a (NM_013733) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Chaf1a
Synonyms:	AL023013; AL024058; Cac1p; CAF-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG211155 representing NM_013733
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTGGAGGAGCCGGAGGCCGCGACGCGGACAGCCGCGGCCGTGGATTGCAAAGACAGACCCGGGTTCC
CAGTGAAGAGGTTAATACAAGCCCGCTTGCCCTTCAAACGCCTGAACCTTGTTCCCAAGGAGAAAGTTGA
GGAAGACACATCACCAAAAGCAGCTGTGGAAAGCAAAGTCCCGGATCTACAATTGTCTTTGGGCACTTTT
GAAAGCCAGTGTCACACAGGCTCTCACGTAGGCTTGAGTACAAAGTTGGTCGGTGGCCAGGGCCCCATTG
ATAGCTTCTTGAGGGCAACAATCAAGCCAGTACCGAGTGTGGTCATTATCGACCTGACGGAGAACTGCAG
TGACATTCCAGACAGCCCTGAGGGCCACAGTGAACTAAGTCCTGACACTGCTGGTGTGGTCACCACAGTG
GAAGGAGCTGCCAAGCAGCAGGAGCACTCTGCAGCAGAGCTGTGTCTCCTAGAGACCCCTTCAGACATCA
CTTGTCACATGGAAGAGGAGCCTGGGAGTCCAGGAGACCCAAAGAGGACGGGTGACTGTCAGGCTGGTTC
ACTACAGAGCTGTCCGGAGCTGACCCCAGGTTCTAGGACATGCCCCACCAAGGAGTTATCAAGCTGGAGC
AAGGCAGGGGATCTCCTATTTATAGAGAAAGTGCCTGTGGTGGTGCTAGAGGACATCCTGGCCACTAAGC
CCTCCATTGCCTCTCTTCCCATGATGTCCCTGGATAGGAGTGTCACTTCAGAGAGTGAAATACTGGAGTC
CTGCCCCGAGGATGACTCCATACTGAGCCACTCCTCCACCAACTCCTCTTCTCCAACCAGCTCTCCTGAG
GGACCATCCACACCCCCAGAACATCGGGGTGGGAGAAGCTCCCCCTCCACCCCAGCCTGCAGAGTTGCCA
AGAACTTTGTCAAAGGCTCCACAGAGAAGGGCAGGAGCAAACTGCACAGAGATAGAGAACAGCAGAGGGA
AGAGAAGGAAAAGCTGAGGGAAGAGATACGACGAGCCAAGGAGGAGGCACGGAAGAAGAAGGAGGAGGAG
AAGGAGCTGAAGGAAAAGGAGCGGAGGGAAAAGCGGGAGAAAGATGAGAAGGAGAAGGCGGAGAAGCAGC
GGCTAAAGGAGGAAAAACGCAAGGAGCGGCAGGAAGCTCTGGAGGCTAAACTGGAGGAGAAGAGGAAGAA
GGAGGAAGAGAAGCGGTTACGGGAGGAAGAGAAGCGGTTACGGGAAGAAGAGAAGCGCATTAAGGCAGAA
AAGGCAGAGATCACTCGATTCTTCCAGAAACCGAAGACTCCGCAGGCTCCCAAGACCCTGGCCGGTTCCT
GTGGTAAGTTTGCCCCCTTTGAAATCAAAGAACACATGGTGCTGGCTCCACGGTGCCGAGCTGCCTTGGA
TCAAGACCTGTGCGATCAGCTGGACCAGCTCCTGCAGCAGCAGAGTGTGGCAAGCACCTTCCTCAGTGAC
CTAAAAAGCCGGCTGCCCTTGAGATCGGGGCCCACCCGGGTCTGTGGCCATGACACAGACATCATGAACA
GGGATGTGGTCATTGTGGAGAGCAGCAAGGTGGACGGTGTGTCTGAAAGGAAGAAGTTTGGCCGCATGAA
GCTTCTGCAGTTCTCAGAGAACCACCGGCCAGCATACTGGGGGACGTGGAACAAGAAGACAGCCATCATC
CGCCCCCGGAACCCCTGGGCCCAGGACAAAGACCTTCTTGACTATGAGGTAGACAGTGACGATGAGTGGG
AAGAGGAGGAACCTGGGGAGTCTTTGTCCCACAGTGAGGGGGATGAGGATGACGATGTGGGGGAAGATGA
GGATGAGGACGATGGCTTCTTTGTGCCCCATGGGTACTTATCTGAAGATGAAGGCGTGACTGAGGAGTGT
GCAGACCCTGAGAACCACAAAGTACACCAGAAGCTGAAGGCCAAGGAGTGGGATGAGCTCCTAGCCAAGG
GCAAGCGCTTTCGTGTGCTGCAGCCTGTGCACGTGGGATGTGTATGGGCATCAGAGGCAGCCAACTGCAC
GAGTTCCGACTTGAAGCTGCTGCAGCAGTTCACTGCATGCCTGCTGGATGTGGCATCCCCTGATGAGCCA
GAACCCGGGGCCTCCAGGAGGGAAAAGAGGGACCAGCATATCCTGGCCCAGTTGCTTCCGCTGCTACATG
GCAATGTGAATGGGAGCAAGGTGATCATCCATGAATTCCAGGAGCAATGCCGCAGGGGCCTGCTGACCCT
TCCAAGTCCCACCCCACACCTGCAGATGCCCAACTTGGAGGATGCTGTTGCTGTGCCATCCAAGGCCAGG
CTGAAGCGCCTTATCTCTGAGAACTCTGCCTATGAGAAGCGGCCCAACTTCCGTATGTGCTGGTATGTGC
ACCCAGAGGTGCTCAAGAGCTTTGGCCAGGAGTGCCTGCCAGTGCCCTGCCAGTGGACCTACATCACCAC
CATGCCCTCAGCACCCAGGGAAGACAGTGGCAGTGCTTCTACTGAGGGGCCTGGCCAGAGCACACCTATG
CTACTCAAGCGGAAGCCAGCGGCCACCATGTGCATCACGCAGTTTATGAAGAAGCGGCGCTATGATGGAC
AGGTTGGGTCTGGGGACATGGATGGCTTCCAGGCAGACACAGAAGAGGATGAAGAGGATGACACAGACTG
TATGATCATAGATGTGCCAGATGTTGGGAGTGACGTGTCAGAAGCTCCCATACCTGCTCCCACACTTTGC
AAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

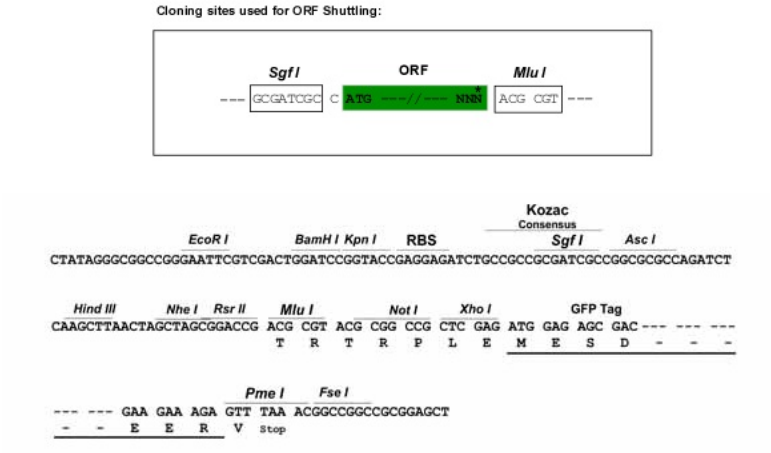
>MG211155 representing NM_013733
Red=Cloning site Green=Tags(s)

MLEEPEAATRTAAAVDCKDRPGFPVKRLIQARLPFKRLNLVPKEKVEEDTSPKAAVESKVPDLQLSLGTF
ESQCHTGSHVGLSTKLVGGQGPIDSFLRATIKPVPSVVIIDLTENCSDIPDSPEGHSELSPDTAGVVTTV
EGAAKQQEHSAAELCLLETPSDITCHMEEEPGSPGDPKRTGDCQAGSLQSCPELTPGSRTCPTKELSSWS
KAGDLLFIEKVPVVVLEDILATKPSIASLPMMSLDRSVTSESEILESCPEDDSILSHSSTNSSSPTSSPE
GPSTPPEHRGGRSSPSTPACRVAKNFVKGSTEKGRSKLHRDREQQREEKEKLREEIRRAKEEARKKKEEE
KELKEKERREKREKDEKEKAEKQRLKEEKRKERQEALEAKLEEKRKKEEEKRLREEEKRLREEEKRIKAE
KAEITRFFQKPKTPQAPKTLAGSCGKFAPFEIKEHMVLAPRCRAALDQDLCDQLDQLLQQQSVASTFLSD
LKSRLPLRSGPTRVCGHDTDIMNRDVVIVESSKVDGVSERKKFGRMKLLQFSENHRPAYWGTWNKKTAII
RPRNPWAQDKDLLDYEVDSDDEWEEEEPGESLSHSEGDEDDDVGEDEDEDDGFFVPHGYLSEDEGVTEEC
ADPENHKVHQKLKAKEWDELLAKGKRFRVLQPVHVGCVWASEAANCTSSDLKLLQQFTACLLDVASPDEP
EPGASRREKRDQHILAQLLPLLHGNVNGSKVIIHEFQEQCRRGLLTLPSPTPHLQMPNLEDAVAVPSKAR
LKRLISENSAYEKRPNFRMCWYVHPEVLKSFGQECLPVPCQWTYITTMPSAPREDSGSASTEGPGQSTPM
LLKRKPAATMCITQFMKKRRYDGQVGSGDMDGFQADTEEDEEDDTDCMIIDVPDVGSDVSEAPIPAPTLC
K

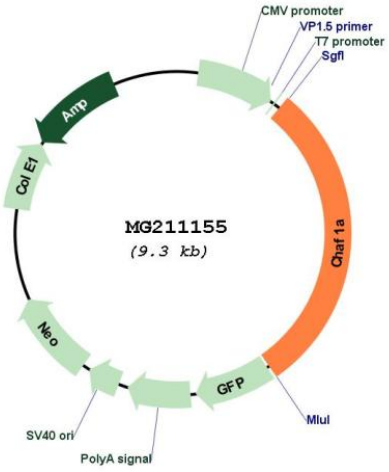
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_013733
ORF Size:	2733 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_013733.3, NP_038761.1
RefSeq Size:	3308 bp
RefSeq ORF:	2736 bp
Locus ID:	27221
UniProt ID:	Q9QWF0
Cytogenetics:	17 D

Gene Summary: Core component of the CAF-1 complex, a complex thought to mediate chromatin assembly in DNA replication and DNA repair. Assembles histone octamers onto replicating DNA in vitro. CAF-1 performs the first step of the nucleosome assembly process, bringing newly synthesized histones H3 and H4 to replicating DNA; histones H2A/H2B can bind to this chromatin precursor subsequent to DNA replication to complete the histone octamer. CHAF1A binds to histones H3 and H4. It may play a role in heterochromatin maintenance in proliferating cells by bringing newly synthesized cbx proteins to heterochromatic DNA replication foci.[UniProtKB/Swiss-Prot Function]