

Product datasheet for **RG217530**

MACROH2A1 (NM_138610) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MACROH2A1 (NM_138610) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MACROH2A1
Synonyms:	H2A.y; H2A/y; H2AF12M; H2AFY; MACROH2A1.1; macroH2A1.2; mH2A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217530 representing NM_138610 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGCGAGCCGGTGGGAAGAAGAAGTCCACCAAGACGTCCAGGTCTGCCAAAGCAGGAGTCATCTTTC
CCGTGGGGCGGATGCTGCGGTACATCAAGAAAGGCCACCCCAAGTACAGGATTGGAGTGGGGCACCCGT
GTACATGGCCCGCTCCTGGAATACCTGACAGCGGAGATTCTGGAGCTGGCTGGCAATGCAGCGAGAGAC
ACAAGAAGGGACGGGTACACCCCGGCACATCCTGCTGGCTGTGGCCAATGATGAAGAGCTGAATCAGC
TGCTAAAAGGAGTCACCATAGCCAGTGGGGGTGTGTTACCCAACATCCACCCGAGTTGCTAGCGAAGAA
GCGGGGATCCAAAGGAAAGTTGGAAGCCATCATCACACCACCCAGCCAAAAGGCCAAGTCTCCATCC
CAGAAGAAGCCTGTATCTAAAAAGCAGGAGGCAAGAAAGGGGCCCGAAATCCAAGAAGAAGCAGGGTG
AAGTCAGTAAGGCAGCCAGCGCCGACAGCACAACCGAGGGCACACCTGCCGACGGCTTCACAGTCTCTC
CACCAAGAGCCTCTTCTTGCCAGAAGCTGAACCTTATTCACAGTGAATCAGTAATTTAGCCGGCTTT
GAGGTGGAGGCCATAATCAATCTACCAATGCTGACATTGACCTTAAAGATGACCTAGGAAAACACGCTGG
AGAAGAAAGGTGGCAAGGAGTTTGTGGAAGCTGTCTGGAACCTCCGAAAAAGAACGGGCCCTTGGAAAGT
AGCTGGAGCTGCTGTGACGCGAGGCCATGGCCTGCCTGCCAAGTTTGTGATCCACTGTAATAGTCCAGTT
TGGGGTGCAGACAAGTGTGAAGAATCTGAAAAAGACAGTAAAAACTGCTTGGCCCTGGCTGATGATA
AGAAGCTGAAATCCATTGCAATTCATCCATCGGCAGCGCAGGAACGGTTTTCCAAAGCAGACAGCAGC
TCAGCTGATTCTGAAGGCCATCTCCAGTTACTTCGTGTCTACAATGTCCTCTTCCATCAAAAACGGTGTAC
TTCGTGCTTTTTGACAGCGAGAGTATAGGCATCTATGTGCAGGAAATGGCCAAGCTGGACGCCAAC

ACGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG217530 representing NM_138610
 Red=Cloning site Green=Tags(s)

MSSRGGKKKSTKTSRSKAGVIFPVGRMLRYIKKGHPKYRIGVGAPVYMAAVLEYLTAEILELAGNAARD
 NKKGRVTPRHILLAVANDEELNQLLKGVTIASGGVLPNIHPELLAKKRGSKGKLEAIIPTPPAKKAKSPS
 QKKPVSKKAGGKKGARKSKKKQGEVSKAASADSTTEGTPADGFTVLSTKSLFLGQKLNLIHSEISNLAGF
 EVEAIIINPTNADIDLKDDLGNLLEKKGGKEFVEAVLELRKKNGPLEVAGAAVSAGHGLPAKFVVIHCNSPV
 WGADKCEELLEKTVKNCLALADDKLLKSIAPFSGSRNGFPKQATAQLILKAISSYFVSTMSSSIKTVY
 FVLFDSESIGIYVQEMAKLDAN

TRTRPLE - GFP Tag - V

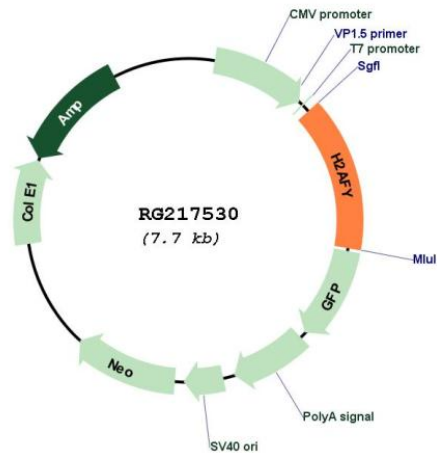
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_138610

ORF Size:	1116 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:	<ol style="list-style-type: none">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_138610.3
RefSeq Size:	1940 bp
RefSeq ORF:	1119 bp
Locus ID:	9555
UniProt ID:	O75367
Cytogenetics:	5q31.1
Domains:	H2A, A1pp, histone
Protein Pathways:	Systemic lupus erythematosus
Gene Summary:	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene encodes a replication-independent histone that is a member of the histone H2A family. It replaces conventional H2A histones in a subset of nucleosomes where it represses transcription and participates in stable X chromosome inactivation. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Oct 2015]