

Product datasheet for RC217530

MACROH2A1 (NM_138610) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MACROH2A1 (NM_138610) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MACROH2A1
Synonyms:	H2A.y; H2A/y; H2AF12M; H2AFY; MACROH2A1.1; macroH2A1.2; mH2A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217530 representing NM_138610 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGAGCCGCGGTGGGAAGAAGAAGTCCACCAAGACGTCCAGGTCTGCCAAAGCAGGAGTCATCTTTC
CCGTGGGCGGATGCTGCGGTACATCAAGAAAGGCCACCCCAAGTACAGGATTGGAGTGGGGCACCCGT
GTACATGGCCCGCTCCTGGAATACCTGACAGCGGAGATTCTGGAGCTGGCTGGCAATGCAGCGAGAGAC
ACAAGAAGGGACGGGTACACCCCGGCACATCCTGCTGGCTGTGGCCAATGATGAAGAGCTGAATCAGC
TGCTAAAAGGAGTCACCATAGCCAGTGGGGGTGTGTTACCCAACATCCACCCGAGTTGCTAGCGAAGAA
GCGGGGATCCAAAGGAAAGTTGGAAGCCATCATCACACCACCCAGCCAAAAGGCCAAGTCTCCATCC
CAGAAGAAGCCTGTATCTAAAAAGCAGGAGGCAAGAAAGGGGCCCGAAATCCAAGAAGAAGCAGGGTG
AAGTCAGTAAGGCAGCCAGCGCCGACAGCACAACCGAGGGCACACCTGCCGACGGCTTACAGTCTCTC
CACCAAGAGCCTCTTCTTGCCAGAAGCTGAACCTTATTCACAGTGAATCAGTAATTTAGCCGGCTTT
GAGGTGGAGGCCATAATCAATCTACCAATGCTGACATTGACCTTAAAGATGACCTAGGAAAACACGCTGG
AGAAGAAAGGTGGCAAGGAGTTTGTGGAAGCTGTCTGGAACCTCCGAAAAAGAACGGCCCTTGGAAAT
AGCTGGAGCTGCTGTGACGCGAGGCCATGGCCTGCCTGCCAAGTTTGTGATCCACTGTAATAGTCCAGTT
TGGGGTGCAGACAAGTGTGAAGAACTTCTGAAAAGACAGTGAAGAACTGCTTGGCCCTGGCTGATGATA
AGAAGCTGAAATCCATTGCAATTTCCATCCATCGGCAGCGCAGGAACGGTTTTCCAAAGCAGACAGCAGC
TCAGCTGATTCTGAAGGCCATCTCCAGTTACTTCGTGTCTACAATGTCCTCTTCCATCAAAAACGGTGTAC
TTCGTGCTTTTTGACAGCGAGAGTATAGGCATCTATGTGCAGGAAATGGCCAAGCTGGACGCCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC217530 representing NM_138610
 Red=Cloning site Green=Tags(s)

MSSRGGKKKSTKTSRSKAGVIFPVGRMLRYIKKGHPKYRIGVGPVYMAAVLEYLTAEILELAGNAARD
 NKKGRVTPRHILLAVANDEELNQLLKGVTIASGGVLPNIHPELLAKKRGSKGKLEAIITPPPAKKAKSPS
 QKKPVSKKAGGKKGARKSKKKQGEVSKAASADSTTEGTPADGFTVLSTKSLFLGQKLNLIHSEISNLAGF
 EVEAIINPTNADIDLKDDLGNLLEKKGKKEFVEAVLELRKKNPLEVAGAAVSAGHGLPAKFVIHCNSPV
 WGADKCEELLEKTVKNCLALADDKLKSIAFPSIGSGRNGFPKQTAACLILKAISSYFVSTMSSSIKTVY
 FVLFDSESIGIYVQEMAKLDAN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

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:

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

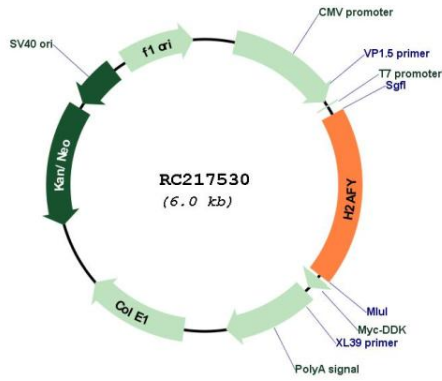
Domains: H2A, A1pp, histone

Protein Pathways: Systemic lupus erythematosus

MW: 39.6 kDa

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]

Product images:



Circular map for RC217530