

## **Product datasheet for RC217302**

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# HMGA1 (NM\_145904) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: HMGA1 (NM\_145904) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: HMGA1

Synonyms: AL023995; high mobility group AT-hook 1; high mobility group protein I; HMG-I(Y); HMG-R,

HMGIY, HMGA1A, MGC4242, MGC4854, MGC12816; Hmga1a; Hmga1b; Hmgi; HMGI(Y); Hmgiy;

HMGY; MGC102580

Mammalian Cell

Selection:

Neomycin

**Vector:** pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RC217302 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

AAGAGGAGGCATCTCGCAGGAGTCCTCGGAGGAGGAGCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA** 

Protein Sequence: >RC217302 protein sequence

Red=Cloning site Green=Tags(s)

MSESSSKSSQPLASKQEKDGTEKRGRGRPRKQPPVSPGTALVGSQKEPSEVPTPKRPRGRPKGSKNKGAA

KTRKTTTTPGRKPRGRPKKLEKEEEEGISQESSEEEQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6411">https://cdn.origene.com/chromatograms/mk6411</a> h04.zip

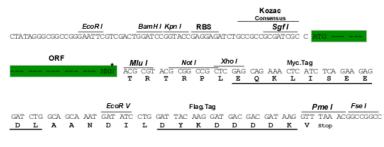
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM 145904

ORF Size: 321 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: <u>NM 145904.1</u>, <u>NP 665911.1</u>

RefSeq Size: 1978 bp
RefSeq ORF: 323 bp
Locus ID: 3159
Cytogenetics: 6p21.31



Protein Families: Druggable Genome, Stem cell - Pluripotency, Stem cell relevant signaling - JAK/STAT signaling

pathway, Transcription Factors

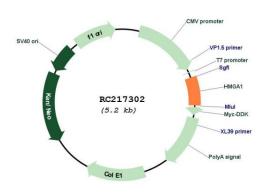
**MW:** 11.7 kDa

**Gene Summary:** This gene encodes a chromatin-associated protein involved in the regulation of gene

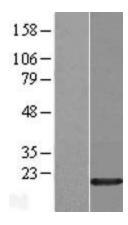
transcription, integration of retroviruses into chromosomes, and the metastatic progression of cancer cells. The encoded protein preferentially binds to the minor groove of AT-rich regions in double-stranded DNA. Multiple transcript variants encoding different isoforms have been found for this gene. Pseudogenes of this gene have been identified on multiple

chromosomes. [provided by RefSeq, Jan 2016]

# **Product images:**

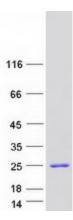


Circular map for RC217302



Western blot validation of overexpression lysate (Cat# [LY407840]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217302 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified HMGA1 protein (Cat# [TP317302]). The protein was produced from HEK293T cells transfected with HMGA1 cDNA clone (Cat# RC217302) using MegaTran 2.0 (Cat# [TT210002]).