

Product datasheet for **RC214681**

HMGA2 (NM_003484) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HMGA2 (NM_003484) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: HMGA2
Synonyms: BABL; HMGI-C; HMGIC; LIPO; SRS5; STQTL9
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC214681 representing NM_003484
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCGCACGGGTGAGGGCGCGGGCAGCCGTCCACTTCAGCCAGGGACAACCTGCCGCCCCAGCGC
CTCAGAAGAGAGGACGCGGCCGCCAGGAAGCAGCAGCAAGAACCAACCGGTGAGCCCTCTCTAAGAG
ACCCAGGGGAAGACCCAAAGGCAGCAAAAACAAGAGTCCCTCTAAAGCAGCTCAAAGAAAGCAGAAAGCC
ACTGGAGAAAAACGGCCAAGAGGCAGACCTAGGAAATGGGACAATCTACTACCAAGAACCAGCTCCAAGA
AGAAAACATCTCTGGGAAACAGTACCAAAAGGAGTCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214681 representing NM_003484
Red=Cloning site Green=Tags(s)
MSARGEGAGQPSTSAQGQPAAPAPQKRGRGRPRKQQQEPTGEPSPKRPRGRPKGSKNKSPSKAAQKKA
EATGEKRPRGRPRKWDNLLPRTSSKKKTSLSGNSTKRSH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3260_d01.zip

Restriction Sites: SgfI-MluI



[View online >](#)

Cloning Scheme:


ACCN: NM_003484

ORF Size: 318 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_003484.1](#), [NP_003475.1](#)

RefSeq Size: 1539 bp

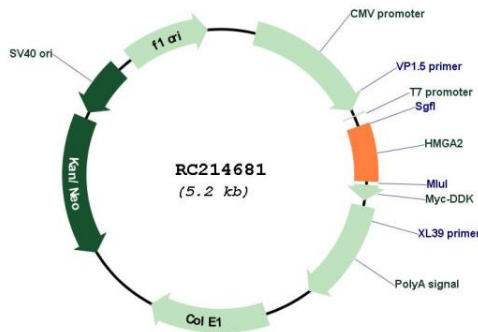
RefSeq ORF: 321 bp

Locus ID: 8091

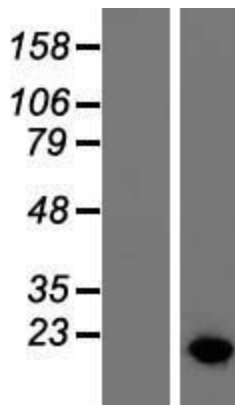
UniProt ID: [P52926](#)
Cytogenetics: 12q14.3
Protein Families: Druggable Genome
MW: 11.3 kDa

Gene Summary: This gene encodes a protein that belongs to the non-histone chromosomal high mobility group (HMG) protein family. HMG proteins function as architectural factors and are essential components of the enhancesome. This protein contains structural DNA-binding domains and may act as a transcriptional regulating factor. Identification of the deletion, amplification, and rearrangement of this gene that are associated with myxoid liposarcoma suggests a role in adipogenesis and mesenchymal differentiation. A gene knock out study of the mouse counterpart demonstrated that this gene is involved in diet-induced obesity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

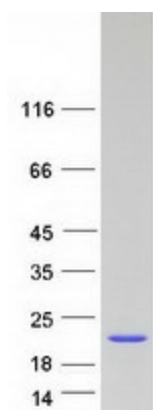
Product images:



Circular map for RC214681



Western blot validation of overexpression lysate (Cat# [LY418572]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214681 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HMGA2 protein (Cat# [TP314681]). The protein was produced from HEK293T cells transfected with HMGA2 cDNA clone (Cat# RC214681) using MegaTran 2.0 (Cat# [TT210002]).