

Product datasheet for RC201894

HMG20A (NM_018200) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HMG20A (NM_018200) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HMG20A
Synonyms:	HMGX1; HMGXB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201894 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAAACTTGATGACTAGCTCCACCCTACCGCCCTTTTTGCAGATGAAGACGGTTCCAAGGAGAGTA
ATGATCTGGCTACCACTGGGTTAAATCACCCAGAGGTTCCATACAGTAGTGGCGCCACATCATCCACCAA
CAATCCAGAATTTGTGGAGGATCTCTCAAGGTCAGTTGCTTCAGAGTGAGTCTTCAAATGCAGCAGAA
GGCAATGAACAGAGGCATGAAGATGAGCAACGAAGTAAACGAGGAGGTTGGTCCAAGGAAGAAAGAGGA
AGAAACCTCTTCGAGACAGCAATGCACCCAAATCCCCCTTACAGGATATGTTTCGGTTCATGAATGAGCG
TCGAGAACAACCTTCGAGCAAAGAGACCAGAAGTCCCATTTCCAGAAATCAAGGATGTTAGGCAATGAA
TGGAGTAAACTGCCTCCTGAGGAAAAACAGCGCTACCTTGATGAAGCAGACAGAGATAAGGAGCGTTACA
TGAAGGAACTGGAACAGTATCAGAAAACAGAGGCCACAAAGTCTTCAGTAGGAAAACCCAGGACCGTCA
GAAAGGCAAATCTCATAGGCAAGATGCAGCCCGGAGGCCACTCATGATCATGAGAAAAGAAACAGAGGTA
AAGGAACGGTCTGTTTTGACATCCCTATATTTACAGAGGAATCTTGAACCATAGCAAAGCTCGGGAAG
CAGAGCTCCGCCAGCTTCGCAAATCCAACATGGAGTTGAGGAGAGGAATGCAGCCCTGCAAAAGCAGCT
GGAGAGCATGCGCACAGCAGTGGAGAAGCTGGAGTGGATGTGATCCAGGAGCGGAGCCGCAACACAGTC
TTACAGCAGCACCTGGAGACCCTGCGGAGGTGCTGACCAGCAGCTTTGCCAGCATGCCCTTGCCCTGGAA
GTGGAGAGACACCTACAGTGGACACCATTGACTCATATATGAACAGACTGCACAGTATTATTTTAGCTAA
TCCCAAGACAATGAAAACCTCATAGCTACAGTTCGAGAAGTTGTGAACAGACTCGATCGT

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC201894 protein sequence
 Red=Cloning site Green=Tags(s)

```

MENLMTSSTLPLPFADEDGSKESNDLATTGLNHPEVPYSSGATSSSTNNPEFVEDLSQGQLLQSESSNAAE
GNEQRHEDEQRSKRGGWSKGRKRKKPLRDSNAPKSPLTGYVRFMNERREQLRAKRPEVPFPEITRMLGNE
WSKLPPEEKQRYLDEADRDKERYMKELEQYQKTEAYKVF SRKTQDRQKGS HRQDAAARQATHDHEKETE V
KERSVFDIPIFTEEFLNHASKAREALRQLRKS NMEFEERNAALQKHVESMRTAVEKLEVDVIQERSRNTV
LQQHLETLRQVLTSSFAS MPLPGSGETPTVDTIDS YMNRLHSIILANPQDNENFIATVREVVNRLDR
  
```

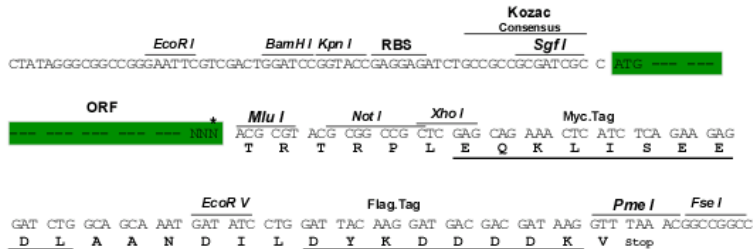
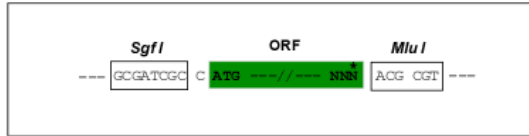
TRTRP**LE****QKLISEEDLA****ANDILDYKDDDD****DKV**

Chromatograms: https://cdn.origene.com/chromatograms/mk6307_b07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_018200

ORF Size: 1041 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_018200.3](#)

RefSeq Size: 3898 bp

RefSeq ORF: 1044 bp

Locus ID: 10363

UniProt ID: [Q9NP66](#)

Cytogenetics: 15q24.3

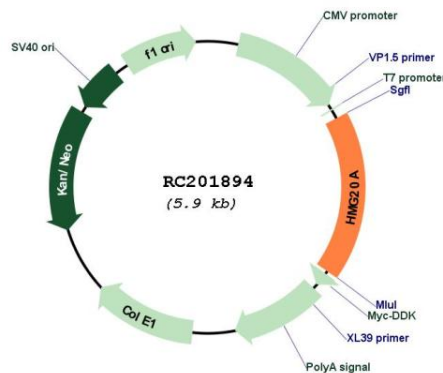
Domains: HMG

Protein Families: Transcription Factors

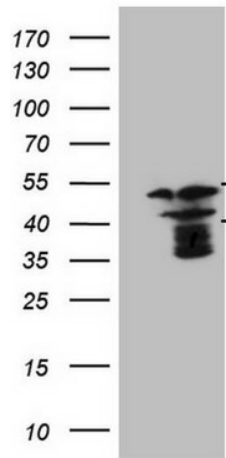
MW: 40.1 kDa

Gene Summary: Plays a role in neuronal differentiation as chromatin-associated protein. Acts as inhibitor of HMG20B. Overcomes the repressive effects of the neuronal silencer REST and induces the activation of neuronal-specific genes. Involved in the recruitment of the histone methyltransferase KMT2A/MLL1 and consequent increased methylation of histone H3 lysine 4 (By similarity).[UniProtKB/Swiss-Prot Function]

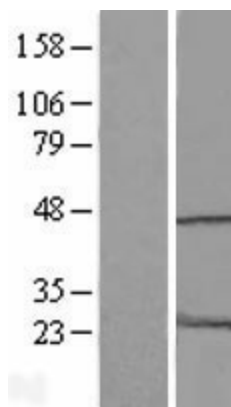
Product images:



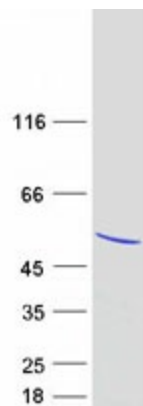
Circular map for RC201894



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HMG20A (Cat# RC201894, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HMG20A (Cat# [TA807042]). Positive lysates [LY413245] (100ug) and [LC413245] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413245]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201894 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HMG20A protein (Cat# [TP301894]). The protein was produced from HEK293T cells transfected with HMG20A cDNA clone (Cat# RC201894) using MegaTran 2.0 (Cat# [TT210002]).