

Product datasheet for **SC116765**

HMG4 (HMGB3) (NM_005342) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HMG4 (HMGB3) (NM_005342) Human Untagged Clone
Tag:	Tag Free
Symbol:	HMG4
Synonyms:	HMG-2a; HMG-4; HMG2A; HMG4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_005342, the custom clone sequence may differ by one or more nucleotides

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ATGGCTAAAGGTGACCCCAAGAAACCAAAGGGCAAGATGTCCGCTTATGCCTTCTTTGTGCAGACATGCA  
GAGAAGAACATAAGAAGAAAAACCCAGAGGTCCCTGTCAATTTTGCAGAAATTTTCCAAGAAGTGCTCTGA  
GAGGTGGAAGACGATGTCCGGGAAAGAGAAATCTAAATTTGATGAAATGGCAAAGGCAGATAAAGTGCGC  
TATGATCGGGAATGAAGGATTATGGACCAGCTAAGGGAGGCAAGAAGAAGAAGGATCCTAATGCTCCCA  
AAAGGCCACCGTCTGGATTCTTCTGTTCTGTTTCAGAATTCGCCCAAGATCAAATCCACAAACCCCGG  
CATCTCTATTGGAGACGTGGCAAAAAAGCTGGGTGAGATGTGGAATAATTTAAATGACAGTAAAAGCAG  
CCTTACATCACTAAGGCGCAAAGCTGAAGGAGAAGTATGAGAAGGATGTTGCTGACTATAAGTCGAAAG  
GAAAGTTTGATGGTGCAAGGGTCTGCTAAAGTTGCCCGGAAAAAGGTGGAAGGGAAGATGAAGAAGA  
GGAGGAGGAAGAAGAGGAGGAGGAGGAGGAGGATGAATAA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005342 unedited
 TGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTGGCCAATCAGGCGG
 CTCTCGTGGAGGCAGCTAGCGCGAGGCTGGGGAGCGCTGAGCCGCGCGTCGTGCCCTGCG
 CTGCCCAGACTAGCGAACAAACAGTACAGGATGGCTAAAGGTGACCCCAAGAAACCAAAG
 GGCAAGATGTCCGCTTATGCCTCTTTGTGCAGACATGCAGAGAAGAACAATAAGAAGAAA
 AACCCAGAGGTCCTGTCAATTTTGCAGAAATTTCCAAGAAGTGCTCTGAGAGGTGGAAG
 ACGATGTCCGGGAAAGAGAAATCTAAATTTGATGAAATGGCAAAGGCAGATAAAGTGCCG
 TATGATCGGGAAATGAAGGATTATGGACCAGCTAAGGGAGGCAAGAAGAAGAAAGGATCCT
 AATGCTCCCAAAAGGCCACCGTCTGGATTCTTCCTGTTCTGTTTCAGAATTCGCCCAAG
 ATCAAATCCACAAACCCCGCATCTCTATTGGAGACGTGGCAAAAAGCTGGGTGAGATG
 TGGAAATAATTTAATGACAGTGAAAAGCAGCCTTACATCACTAANGCCGGCAAGCTGAAG
 GAGAAGTATGAGAAGGATGTTGCTGACTATAAGTCGAAAGGAAAGTTTGTGGTGCAAAG
 GGTCTGCTAAGTTTGCCTCGAAAAGGTGGAAGAGGAAGATGAAGACGAGGACGAGGAA
 TAACAGAGAGGAGGAGGAAGGAGAAGATTGAATAAAAAAACTGTTTATTCTGCCTCCTTG
 CGAAAACCTAGAGTAAGGGAAGCGCCGAAATTCACATTTCTTTATTTGAGAGGTGGCTGG
 GTGCCCTCATTAGGTTAATTACAAATTTGAACCCGACATATTGGACTCCTCAAAAAGCTCT
 AAAATTGCAATGGTTAACTGAAAGGCCTGGTGTGTTGAACACCCGAACTGATAAGGTGACT
 T

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_005342 unedited
 GAACTAGAGACTGTATATCTTAACCTCCAAAACATTTTCAGCATTCTAACATACAAAAAAA
 TAACAGAACGTTGCGAATCGTGTAAAGTACAGGAGGTTCTTGAACCTTTCATTGATGCAG
 TGACTCTTTGCTTTGCTGACAATGAAGAGTTCTATAGTTTGTAAAAACAACAGTTTA
 AAAACTACCGTACTTAAAAAAAATATTCTCATGCCAGCTGACCCCTTTGTCCACA
 GCTAAGATGGCAGTTGAATGCTATGTCACATGTTCTGAAACAAGACAACCTGTAGCTAA
 ATGGATGCCCCCTGCTCAGTGAACAGGTCAGACTTACTCTGCACGCTCTGTGTTACTGT
 CTGTCCAAAACGATTTTCTCCTCACATGTTCCACGCTTTCTATGATCACGAAGGTTTG
 TATCGGTTGTTTTGTTCTTTCTCACACTATGCATGTATTCTGGGGACAACCTCACGATTG
 CTAGCCAATAACCATACTTGCCACCACCTTGCCAATTATAAGAAAATGTCACAAACCAT
 CCAAACGCCTTTGTCCCCTCAACAGTTATGTGCTCAGTTGTGGATTAACACCTTAGTG
 CCGTTTTCTCCTCGTAAAATGTCTTGGAACATATGCACAACCTGTGATACTATAGGTGGGTG
 TTTCTAACACCCATGGACACTTAGATGAGAACCATTAGAAAACCTTAGAGATCTTGTGCG
 AGGATTCCCCCTGACTCGACCTCGAATGTTGTAATTAACCTAATGCGGTGCATCTCGCA
 CTTTCAACATAAGAGAAGTGCCATTACCGTGCTCCCGGACTTCAATTTCTCTCTGAG
 ACAGAACTAGTAACGTTATTGTTCTTTGCACGTCCTACTGCAGTTTTACTGATTGCG
 TACTTTCTCCTACTGCTACATACCTTTCTTCGGCGACT

Restriction Sites:

NotI-NotI

ACCN:

NM_005342

Insert Size:

1670 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_005342.2](#), [NP_005333.2](#)

RefSeq Size: 3556 bp

RefSeq ORF: 603 bp

Locus ID: 3149

UniProt ID: [O15347](#)

Cytogenetics: Xq28

Domains: HMG

Protein Families: Transcription Factors

Gene Summary:

This gene encodes a member of a family of proteins containing one or more high mobility group DNA-binding motifs. The encoded protein plays an important role in maintaining stem cell populations, and may be aberrantly expressed in tumor cells. A mutation in this gene was associated with microphthalmia, syndromic 13. There are numerous pseudogenes of this gene on multiple chromosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]

Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1. Variants 1, 2, and 3 encode the same isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.