

Product datasheet for MR203944

Hmox1 (NM_010442) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hmox1 (NM_010442) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hmox1
Synonyms:	D8Wsu38e; Hemox; Hmox; HO-1; HO1; Hsp32
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203944 representing NM_010442 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCGTCCACAGCCCGACAGCATGCCCCAGGATTTGTCTGAGGCCTTGAAGGAGGCCACCAAGGAGG
TACACATCCAAGCCGAGAATGCTGAGTTCATGAAGAACTTTCAGAAGGGTCAGGTGTCCAGAGAAGGCTT
TAAGCTGGTGATGGCTTCCTTGTACCATATCTACACGGCCCTGGAAGAGGAGATAGAGCGCAACAAGCAG
AACCCAGTCTATGCCCACTCTACTTCCCTGAGGAGCTGCACCGAAGGGCTGCCCTGGAGCAGGACATGG
CCTTCTGGTATGGGCCTCACTGGCAGGAAATCATCCCTTGACCGCCAGCCACACAGCACTATGTAAAGCG
TCTCCACGAGGTGGGGCGCACTACCCTGAGCTGCTGGTGGCCACGCATATACCCGCTACCTGGGTGAC
CTCTCAGGGGTCAAGTCTGAAGAAGATTGCACAGAAGGCCATGGCCTTGCCCGAGCTCTGGGGAGGGCC
TGGCTTTTTTACCTTCCCGAACATCGACAGCCCCACCAAGTTCAAACAGCTCTATCGTGCTCGAATGAA
CACTCTGGAGATGACACCTGAGGTCAAGCACAGGGTGACAGAAGAGGCTAAGACCGCCTTCTGTCAAC
ATTGAGCTGTTTGGAGGCTGCAGGTGATGCTGACAGAGGAACACAAAGACCAGAGTCCCTCACAGATGG
CGTCACTTCGTCAGAGGCCTGCTAGCCTGGTGAAGATACTGCCCTGCAGAGACACCCCGAGGGAAACC
CCAGATCAGCACTAGCTCATCCAGACACCGCTCCTCCAGTGGTCTCACTCTCAGTTCCTGTTGGCA
ACAGTGGCAGTGGGAATTTATGCCATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR203944 representing NM_010442
Red=Cloning site Green=Tags(s)

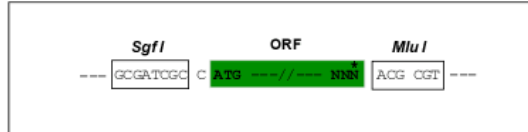
MERPQPDSMPQDLSEALKEATKEVHIQAENAEFMKNFQKGQVSREGFKLVMSLYHIYTALEEEIERNKQ
 NPVYAPLYFPEELHRRRAALEQDMAFWYGPHWQEIIIPCTPATQHYVKRLHEVGRTHPELLVAHAYTRYLGD
 LSGGQVLKkiaQKAMALPSSGEGLAFFTFPNIDSPTKFKQLYRARMNTLEMTPEVKHRVTEEAKTAFLLN
 IELFEELQVMLTEEHKDQSPSQMASLRQRPASLVQDTAPAETPRGKPKIISTSSSQTPLLQWVLTLSFLLA
 TVAVGIYAM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010442

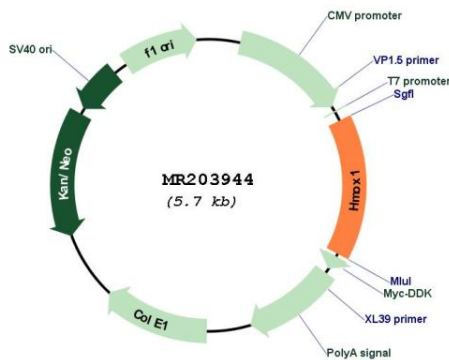
ORF Size: 867 bp

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](#)

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:	<ol style="list-style-type: none"> 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_010442.2</u>
RefSeq Size:	1564 bp
RefSeq ORF:	870 bp
Locus ID:	15368
UniProt ID:	<u>P14901</u>
Cytogenetics:	8 C1
MW:	33.4 kDa
Gene Summary:	Heme oxygenase cleaves the heme ring at the alpha methene bridge to form biliverdin. Biliverdin is subsequently converted to bilirubin by biliverdin reductase. Under physiological conditions, the activity of heme oxygenase is highest in the spleen, where senescent erythrocytes are sequestrated and destroyed. Exhibits cytoprotective effects since excess of free heme sensitizes cells to undergo apoptosis.[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for MR203944