

Product datasheet for **SC128080**

Heme Oxygenase 1 (HMOX1) (NM_002133) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Heme Oxygenase 1 (HMOX1) (NM_002133) Human Untagged Clone
Tag: Tag Free
Symbol: HMOX1
Synonyms: bK286B10; HMOX1D; HO-1; HSP32
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)
Cell Selection: None
Fully Sequenced ORF: >OriGene ORF within SC128080 sequence for NM_002133 edited (data generated by NextGen Sequencing)

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ATGGAGCGTCCGCAACCCGACAGCATGCCCCAGGATTTGTCAGAGGCCCTGAAGGAGGCC
ACCAAGGAGGTGCACACCCAGGCAGAGAATGCTGAGTTCATGAGGAACCTTCAGAAGGGC
CAGGTGACCCGAGACGGCTTCAAGCTGGTATGGCCTCCCTGTACCACATCTATGTGGCC
CTGGAGGAGGAGATTGAGCGCAACAAGGAGAGCCAGTCTTCGCCCTGTCTACTTCCCA
GAAGAGCTGCACCGCAAGGCTGCCCTGGAGCAGGACCTGGCCTTCTGGTACGGGCCCCGC
TGGCAGGAGGTACATCCCCTACACACCAGCCATGCAGCGCTATGTGAAGCGGCTCCACGAG
GTGGGGCGCACAGAGCCGAGCTGCTGGTGGCCACGCCTACACCGCTACCTGGGTGAC
CTGTCTGGGGCCAGGTGCTCAAAAAGATTGCCAGAAAAGCCCTGGACCTGCCAGCTCT
GGCGAGGGCCTGGCCTTCTCACCTTCCCAACATTGCCAGTGCCACCAAGTTCAAGCAG
CTCTACCGCTCCCGCATGAACTCCCTGGAGATGACTCCCGCAGTCAGGCAGAGGGTGATA
GAAGAGGCCAAGACTGCGTTCTGCTCAACATCCAGCTCTTTGAGGAGTTGCAGGAGCTG
CTGACCCATGACACCAAGGACCAGAGCCCTCACGGGCACCAGGGCTTCGCCAGCGGGCC
AGCAACAAAGTGAAGATTCTGCCCCCGTGGAGACTCCCAGAGGGAAGCCCCCACTCAAC
ACCCGCTCCCAGGCTCCGCTTCTCCGATGGTCCCTTACACTCAGCTTTCTGGTGGCGACA
GTTGCTGTAGGGCTTTATGCCATGTGA
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Clone variation with respect to NM_002133.2

5' Read Nucleotide Sequence: >OriGene 5' read for NM_002133 unedited
GCACGAGCCTCCTCTCGAGCGTCTCAGCGCAGCCGCCCGCGGAGCCAGCACGAACG
AGCCCAGCACCCGGCCGGATGGAGCGTCCGCAACCCGACAGCATGCCCCAGGATTTGTCAG
AGGCCCTGAAGGAGGCCACCAAGGAGGTGCACACCCAGGCAGAGAATGCTGAGTTCATG
AGGAACTTTCAGAAGGGCCAGGTGACCCGAGACGGCTTCAAGCTGGTATGGCCTTCCTG
GACCACATCTATGTGGCCCTGGAGGAGGAGATTGAGCGCAACAAGGAGAGCCAGTCTTC
GCC



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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_002133 unedited NNGGGTAAAGACTAGGACCCGCGGCCGAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTA CTATCAGACAATGTTGTTTATTATTTACACAAAAGTTAGACCAAGGCCACAGTGCCGTT AAACACCTCCCTCCCCACCCACGCATGGCTCAAAAACCACCCCAACCCTGCTATAAAAAC AACAGAACACAACAAAAATACTGCATTTGAGGCTGAGCCAGGAACAGAGTGGCTCCAACA AAAATAAGACAAAAACACAAGACACAACATCTTTTCAGGTTTGTGTA AAAATTGCCATGG CCCACGGGGAAAGTGGTCATGGCCGTGCAACAAGGATACTTGA AACTCAGGGCTTTTGG AGGTTTGAGACAGCTGCCACATTAGGGTGTCTTCCAGGCTCTGCTGCAGGA ACTGAGGAT GCTGAAGGGCAGGGCTGATCCCTTCGCCCTCTGAAGTTTAGGCCATTGCCTGGATGTG CTTTTCGTTGGGGAAGATGCCATAGGCTCCTTCCTCTTTCCAGAGAGAGGGACACAGTG AGAGGGCTGGAGGCCCTGAAAGCCTTCAGTGCCACGGTAAGGAAGCCAGCCAAGAGAAT TCCCTCTCTAGAAAGAAGGCCTCCACCGACAAAGTTCATGGCCCTGGGAGCCAGCATG CCTGCATTACATGGCATANAGCCCTACAGCAACTGTGCCACCAGAAAGCTGAGTGTA GGACCCATNCGAGAAGCGGAGCCTGGGAGCGGGTGTGAGTGGGGCTTCCCTCTGGGAG TCTCCACGGGGCAGAAATCTGCACTTTGNTGCTGGCCCGCTGGCGAAGCCCTGGNTGCCG TGAGGNGCTCTGGTCCCTGGTGCATGGGTCAGCAGCTCTGGA ACTTCTCAAAGAGCTG GATG
Restriction Sites:	NotI-NotI
ACCN:	NM_002133
Insert Size:	1580 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_002133.1</u> , <u>NP_002124.1</u>
RefSeq Size:	1550 bp
RefSeq ORF:	867 bp
Locus ID:	3162
UniProt ID:	<u>P09601</u>
Cytogenetics:	22q12.3
Domains:	Heme_oxygenase
Protein Families:	Druggable Genome, Transmembrane

Protein Pathways: Porphyrin and chlorophyll metabolism

Gene Summary: Heme oxygenase, an essential enzyme in heme catabolism, cleaves heme to form biliverdin, which is subsequently converted to bilirubin by biliverdin reductase, and carbon monoxide, a putative neurotransmitter. Heme oxygenase activity is induced by its substrate heme and by various nonheme substances. Heme oxygenase occurs as 2 isozymes, an inducible heme oxygenase-1 and a constitutive heme oxygenase-2. HMOX1 and HMOX2 belong to the heme oxygenase family. [provided by RefSeq, Jul 2008]