

## Product datasheet for **SC320297**

### 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
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_002133 edited  
 CTCTCGAGCGTCTCAGCGCAGCCGCCCGCCGCGGAGCCAGCACGAACGAGCCCAGCACC  
 GGCCGGATGGAGCGTCCGCAACCCGACAGCATGCCCCAGGATTTGTCAGAGGCCCTGAAG  
 GAGGCCACCAAGGAGGTGCACACCCAGGCAGAGAATGCTGAGTTCATGAGGAACTTTCAG  
 AAGGGCCAGGTGACCCGAGACGGCTTCAAGCTGGTGATGGCCCTCCTGTACCACATCTAT  
 GTGGCCCTGGAGGAGATTGAGCGCAACAAGGAGAGCCAGTCTTCGCCCTGTCTAC  
 TTCCCAGAAGAGCTGCACCGCAAGGCTGCCCTGGAGCAGGACCTGGCCTTCTGGTACGGG  
 CCCCCTGGCAGGAGGTATCCCTACACACCAGCCATGCAGCACTATGTGAAGCGGCTC  
 CACGAGGTGGGGCGCACAGAGCCGAGCTGCTGGTGGCCACGCCTACACCCGCTACCTG  
 GGTGACCTGTCTGGGGCCAGGTGCTCAAAAAGATTGCCAGAAAAGCCCTGGACCTGCC  
 AGCTCTGGCGAGGGCCTGGCCTTCTTACCTTCCCAACATTGCCAGTGCACCAAGTTC  
 AAGCAGCTCTACCGCTCCCGCATGAACTCCCTGGAGATGACTCCCGCAGTCAGGCAGAGG  
 GTGATAGAAGAGGCCAAGACTGCGTTCCTGCTCAACATCCAGCTCTTTGAGGAGTTGCAG  
 GAGCTGCTGACCCATGACACCAAGGACCAGAGCCCTCACGGGCACCAGGGCTTCGCCAG  
 CGGGCCAGCAACAAAGTGAAGATTCTGCCCCGTGGAGACTCCAGAGGGAAGCCCCCA  
 CTAAACACCCGCTCCAGGCTCCGCTTCTCCGATGGGTCCCTTACACTCAGCTTCTGGTG  
 GCGACAGTTGCTGTAGGGCTTTATGCCATGTGAATGCAGGCATGCTGGCTCCCAGGGCCA  
 TGAACCTTTGTCGGTGAAGGCCTTCTTTCTAGAGAGGGAATTCTTTGGCTGGCTTCT  
 TACCGTGGGCACTGAAGGCTTTCAGGGCTCCAGCCCTCTCACTGTGCCCTCTCTCTGG  
 AAAGGAGGAAGGAGCCTATGGCATCTTCCCAACGAAAAGCACATCCAGGCAATGGCCTA  
 AACTTCAGAGGGGGCGAAGGGATCAGCCCTGCCCTTCCAGCATCCTCAGTTCCTGCAGCAG  
 AGCCTGGAAGACACCCTAATGTGGCAGCTGTCTCAAACCTCCAAAAGCCCTGAGTTTCAA  
 GTATCCTTGTGACACGGCCATGACCACCTTCCCGTGGGCCATGGCAATTTTACACAA  
 ACCTGAAAAGATGTTGTGCTTGTGTTTTGTCTTATTTTTGTTGGAGCCACTCTGTTCC  
 TGGCTCAGCCTCAATGCAGTATTTTTGTTGTGTTCTGTTGTTTTATAGAGGGTTGGG  
 GTGTTTTTTGAGCCATGCGTGGGTGGGAGGGAGGTGTTAACGGCACTGTGCCCTTGG  
 TCTAACTTTTGTGAAATAATAACAACATTGTCTGATAGTAAAAAAAAAAAAAAAAAAAA  
 AAAAAAAAAAAAAA

**Restriction Sites:** Please inquire

**ACCN:** NM\_002133

**Insert Size:** 1600 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).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002133.1</a> , <a href="#">NP_002124.1</a>
<b>RefSeq Size:</b>	1550 bp
<b>RefSeq ORF:</b>	867 bp
<b>Locus ID:</b>	3162
<b>UniProt ID:</b>	<a href="#">P09601</a>
<b>Cytogenetics:</b>	22q12.3
<b>Domains:</b>	Heme_oxygenase
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Porphyrin and chlorophyll metabolism
<b>Gene Summary:</b>	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]