

Product datasheet for SC322968

Heme oxygenase 2 (HMOX2) (NM_001127204) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Heme oxygenase 2 (HMOX2) (NM_001127204) Human Untagged Clone
Tag:	Tag Free
Symbol:	HMOX2
Synonyms:	HO-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC322968 representing NM_001127204. Blue=Insert sequence Red=Cloning site Green=Tag(s)

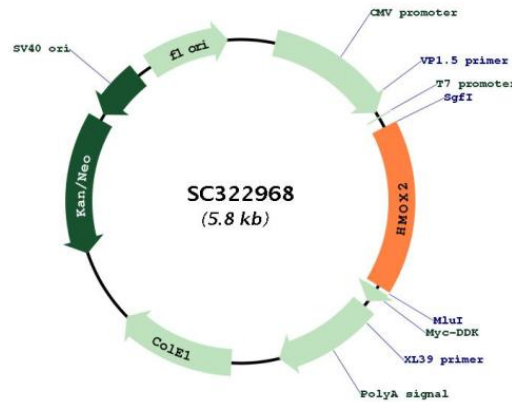
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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGGATCGCC
ATGTCAGCGGAAGTGAAACCTCAGAGGGGTAGACGAGTCAGAAAAAAGAAGCTCTGGGGCCCTAGAA
AAGGAGAACCAATGAGAATGGCTGACCTCTCGGAGCTCCTGAAGGAAGGGACCAAGGAAGCACACGAC
CGGGCAGAAAACACCCAGTTTGTCAAGGACTTCTTGAAGGCAACATTAAGAAGGAGCTGTTTAAGCTG
GCCACCACGGCACTTTACTTCACATACTCAGCCCTCGAGGAGGAAATGGAGCGCAACAAGGACCATCCA
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CACTACATAGGGCAGAACGAGCCGGAGCTACTGGTGGCCCATGCATACACCCGCTACATGGGGGATCTC
TCGGGGGGCCAGGTGCTGAAGAAGTGGCCAGCGAGCACTGAAACTCCCCAGCACAGGGGAAGGGACC
CAGTTCTACCTGTTTGAGAAATGTGGACAATGCCCAGCAGTTCAAGCAGCTCTACCGGGCCAGGATGAAC
GCCCTGGACCTGAACATGAAGACCAAAGAGAGGATCGTGGAGGAGGCCAACAAGGCTTTTGGATATAAC
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CCTGTACACGATGGGAAAGGAGACATGCGTAAATGCCCTTTCTACGCTGCTGAACAAGACAAAGGTGCC
CTGGAGGGCAGCAGCTGTCCCTCCGAACAGCTATGGCTGTGCTGAGGAAGCCAGCCCTCCAGTTTCATC
CTGGCCGCTGGTGTGCCCTAGCTGCTGGACTTTGGCCTGGTACTACATGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



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Plasmid Map:



ACCN: NM_001127204

Insert Size: 951 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).

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_001127204.1](#)

RefSeq Size: 1872 bp

RefSeq ORF: 951 bp

Locus ID:	3163
UniProt ID:	P30519
Cytogenetics:	16p13.3
Protein Families:	Transmembrane
Protein Pathways:	Porphyrin and chlorophyll metabolism
MW:	36 kDa
Gene Summary:	<p>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. Several alternatively spliced transcript variants encoding three different isoforms have been found for this gene. [provided by RefSeq, Oct 2013]</p> <p>Transcript Variant: This variant (1) differs in the 5' UTR and coding sequence compared to variant 5. The resulting isoform (b) is shorter at the N-terminus compared to isoform a. Variants 1, 2, 3, 4, 6, 7, and 8 all encode the same isoform (b).</p>