

Product datasheet for SC128252

Heme oxygenase 2 (HMOX2) (NM_002134) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Heme oxygenase 2 (HMOX2) (NM_002134) Human Untagged Clone
Tag:	Tag Free
Symbol:	Heme oxygenase 2
Synonyms:	HO-2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_002134 edited
 GCCGGACAGGCGACAGCGACCTGCGGCAGGACCAGAGGAGCGAGAGCAGCAAGAACCACA
 CCCAGCAGCAATGTCAGCGGAAGTGAAACCTCAGAGGGGGTAGACGAGTCAGAAAAA
 GAACTCTGGGGCCCTAGAAAAGGAGAACCAAATGAGAATGGCTGACCTCTCGGAGCTCCT
 GAAGGAAGGGACCAAGGAAGCACACGACCGGGCAGAAAACCCAGTTTGTCAAGGACTT
 CTTGAAAGGCAACATTAAGAAGGAGCTGTTTAAGCTGGCCACCACGGCACTTTACTTCAC
 ATACTCAGCCCTCGAGGAGGAAATGGAGCGCAACAAGGACCATCCAGCCTTTGCCCTTT
 GTACTTCCCCATGGAGCTGCACCGAAGGAGGCGCTGACCAAGGACATGGAGTATTTCTT
 TGGTGAAAAGTGGGAGGAGCAGGTGCAGTGCCCAAGGCTGCCCAGAAGTACGTGGAGCG
 GATCCACTACATAGGGCAGAACGAGCCGGAGCTACTGGTGGCCCATGCATACCCCGCTA
 CATGGGGGATCTCTCGGGGGCCAGGTGCTGAAGAAGGTGGCCAGCGAGCACTGAAACT
 CCCAGCAGAGGGGAAGGACCCAGTTCTACCTGTTTGAGAATGTGGACAATGCCAGCA
 GTTCAAGCAGCTCTACCGGGCCAGGATGAACGCCCTGGACTGAACATGAAGACCAAGA
 GAGGATCGTGGAGGAGGCAACAAGGCTTTTGAGTATAACATGCAGATATTCAATGAACT
 GGACCAGGCCGGCTCCACTGGCCAGAGAGACCTTGGAGGATGGGTTCCCTGTACACGA
 TGGGAAAGGAGACATGCGTAAATGCCCTTTCTACGCTGCTGAACAAGACAAGGTGCCCT
 GGAGGGCAGCAGCTGTCCCTCCGAACAGCTATGGCTGTGCTGAGGAAGCCAGCCTCCA
 GTTCATCTGGCCGCTGGTGTGGCCCTAGCTGCTGGACTTTGGCCTGGTACTACATGTG
 AAGCACCATCATGCCACACCGGTACCCTCCTCCGACTGACCACTGGCCTACCCCTTTC
 TCCAGCCCTGACTAAACTACCACCTCAGGTGACTTTTTAAAAAATGCTGGGTTTAAAGAA
 AGGCAACCAATAAAGCCAGATGCTAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_002134 unedited</p> <pre> ATACGACTCACTATAGGGCGGCCGCAATTCGGCACGAGGGGCGGACAGGCGACAGCGAC CTGCGGCAGGACCAGAGGAGCGAGAGCAGCAAGAACACACCCAGCAGCAATGTCAGCGG AAGTGAAACCTCAGAGGGGGTAGACGAGTCAGAAAAAAGAAGCTCTGGGGCCCTAGAAA AGGAGAACCAATGAGAAATGGCTGACCTCTCGGAGCTCCTGAAGGAAGGGACCAAGGAAG CACACGACCGGGCAGAAAAACCCAGTTTGTCAAGGACTTCTTGAAAGGCAACATTAAGA AGGAGCTGTTTAAGCTGGCCACCACGGCACTTTACTTCACATACTCAGCCCTCGAGGAGG AAATGGAGCGCAACAAGGACCATCCAGCCTTTGCCCTTTGTAAGTCCCATGGAGCTGC ACCGGAAGGAGGCGCTGACCAAGGACATGGAGTATTTCTTTGGTAAAACTGGGAGGAGC AGGTGCAGTGCCCAAGGCTGCCAGAAGTACGTGGAGCGGATCCACTACATAGGGCAGA ACGAGCCGGAGCTACTGGTGGCCATGCATACACCCGCTACATGGGGGATCTCTCGGGG GCCAGGTGCTGAAGAAGGTGGCCAGCGAGCACTGAAACTCCCAGCACAGGGGAAGGGAC CCAGTTTACCTGTTTGAAGATGTGGGACATGCCAGCAGTTCAAGCAGCTCTACCGGGC CAGGATGAACGCCCTGGNACCTGACATGAAGACCAAGAGAGGATCGTGGNAGGAGCCAA CANGGCTNTTGTAGTATACATGCAGATATTCATGAACTGGACCNGNCCGCTCCACTGGCC AGAAGACCTTGGAGGATGGGNTCCTGTACGAGGGAANAGGAGACTGCGNTAAGCCTTNC TAGCTGCTGACNAGACAAGTGCNCTGNAGGCAGCAGCTGTCTTCGACGCTTTGGCNGGG CTGAGAAGCCANCTCAGTATCTGGGCGCTGGGTGGCT </pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_002134 unedited</p> <pre> CCATCGGGGATGGCAACTTCCAGGNCCAGGNAAGCACTGGGGNAGGGTCACAGGNATGC CACCCGGGNATCTGTTCCAGGAAACAGCTATGACCGCGGCCCANATCTAGAGTCGAGTTT TTTTTTTTTTTTTTTTTTTTCTAGCATCTGGCTTTTATTGGTTGCCTTTCTTAAACCA GCATTTTTTTAAAAAGTCACCTGAGGTGGTAGTTTAGTCAGGGCTGGAGAAAGGGGTAGG CCAGTGGTCAGTCGGGAGGAGGGTACCGGTGTGGCATGATGGGTGCTTACATGTAGTAC CAGGCCAAGAGTCCAGCAGCTAGGGCCACACCAGCGGCCAGGATGAACTGGAGGCTGGGC TTCCTCAGCACAGCCATAGCTGTTTCGGAAGGGACAGCTGCTGCCCTCCAGGGCACCTTTG TCTTGTTCAGCAGCGTAGAAAGGGCATTACGCATGTCTCTTTCCCATCGTGTACAGGG AACCCATCCTCCAAGGTCTCTCTGGCCAGTGTGGAGCCGGCCTGGTCCAGTTCATTGAAT ATCTGCATGTTATACTCAAAGCCTTGTGGCCTCCTCCACGATCCTCTCTTTGGTCTTC ATGTTCCAGTCCAGGGCGTTTCATCCTGGCCCGGTAGAGCTGCTTGAAGTCTGGGCATTG TCCACATTTCTAAACAGGTAGAAGTGGGTCCCTTCCCCTGTGCTNGGGAGTTTTCAGTGCT CGCTGGGCCACCTTCTTACGACCTGGCCCCCGAGAGATCCCCCTGTAGCGGGTGTATG CATGGCCACAGTAGCTTCGGCTCGTTCTGCCCTATGTATGGATCCGGTCCACGTAATTC TGGGCAGCCTTGGGGCACTGACCTGGCTCTCCATTTTTACCAAGAATACTCATGTCCTT GGTCAACGCTCCTTCC </pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_002134
Insert Size:	1200 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:	NM_002134.2 , NP_002125.3
RefSeq Size:	1636 bp
RefSeq ORF:	951 bp
Locus ID:	3163
UniProt ID:	P30519
Cytogenetics:	16p13.3
Domains:	Heme_oxygenase
Protein Families:	Transmembrane
Protein Pathways:	Porphyrin and chlorophyll metabolism
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 (3) 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>