

Product datasheet for **KN200463**

Heme Oxygenase 1 (HMOX1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Heme Oxygenase 1
Locus ID:	3162
Components:	<p>KN200463G1, Heme Oxygenase 1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGCGCTTGCCTGTCGGGTTG</p> <p>KN200463G2, Heme Oxygenase 1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGTGGGGCTAGGACGCAAGC</p> <p>KN200463D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 GTTTGCGCAA CGTTGTTGCC ATTGCTACAG GCATCGTGGT GTCACGCTCG TCGTTTGTA TGGCTTCATT
 CAGCTCCGGT TCCCAACGAT C

GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_002133](#)

UniProt ID:

[P09601](#)

Synonyms:

bK286B10; HMOX1D; HO-1; HSP32

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]

Product images:

