

## Product datasheet for KN200463LP

#### OriGene Technologies, Inc.

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

### **Product data:**

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

**Donor DNA:** Luciferase-Puro

Symbol: Heme Oxygenase 1

**Locus ID:** 3162

**Components: KN200463G1**, Heme Oxygenase 1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN200463G2**, Heme Oxygenase 1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN200463LPD**, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

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:** <u>NM 002133</u>

UniProt ID: P09601

**Synonyms:** bK286B10; HMOX1D; HO-1; HSP32

**Summary:** Heme oxygenase, an essential enzyme in heme catabolism, cleaves heme to form biliverdin,

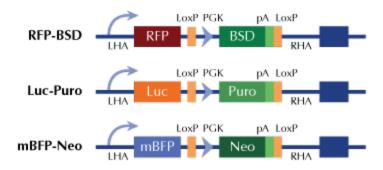
which is subsequently converted to bilirubin by biliverdin reductase, and carbon monoxide, a putative neurotransmitter. Heme oxygenase activity is induced by its substrate heme and by various nonheme substances. Heme oxygenase occurs as 2 isozymes, an inducible heme oxygenase-1 and a constitutive heme oxygenase-2. HMOX1 and HMOX2 belong to the heme

oxygenase family. [provided by RefSeq, Jul 2008]



# **Product images:**

### Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter