

Product datasheet for KN307708LP

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Hif1a Mouse 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

Hif1a Symbol: Locus ID: 15251

KN307708G1, Hif1a gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN307708G2, Hif1a gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN307708LPD, 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.

NM 010431 RefSeq:

UniProt ID: Q61221

Synonyms: AA959795; bHLHe78; HIF-1-alpha; HIF1-alpha; HIF1alpha; MOP1

Summary: This gene encodes the alpha subunit which, along with the beta subunit, forms a

> heterodimeric transcription factor that regulates the cellular and developmental response to reduced oxygen tension. The transcription factor has been shown to regulate genes involved in several biological processes, including erythropoiesis and angiogenesis which aid in increased delivery of oxygen to hypoxic regions. The transcription factor also plays a role in

the induction of genes involved in cell proliferation and survival, energy metabolism,

apoptosis, and glucose and iron metabolism. Alternative splicing results in multiple transcript

variants encoding different isoforms. [provided by RefSeq, Sep 2015]





Product images:

Donor Vector Edited Chromosome



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