

Product datasheet for KN202461RB

OriGene Technologies, Inc.

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HIF-1 alpha (HIF1A) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: RFP-BSD
Symbol: HIF-1 alpha

Locus ID: 3091

Components: KN202461G1, HIF-1 alpha gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN202461G2, HIF-1 alpha gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN202461RBD**, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

RefSeq: <u>NM 001243084</u>, <u>NM 001530</u>, <u>NM 181054</u>

UniProt ID: Q16665

Synonyms: bHLHe78; HIF-1-alpha; HIF-1A; HIF-1alpha; HIF1; HIF1-ALPHA; MOP1; PASD8

Summary: This gene encodes the alpha subunit of transcription factor hypoxia-inducible factor-1 (HIF-1),

which is a heterodimer composed of an alpha and a beta subunit. HIF-1 functions as a master regulator of cellular and systemic homeostatic response to hypoxia by activating transcription of many genes, including those involved in energy metabolism, angiogenesis, apoptosis, and other genes whose protein products increase oxygen delivery or facilitate

metabolic adaptation to hypoxia. HIF-1 thus plays an essential role in embryonic

vascularization, tumor angiogenesis and pathophysiology of ischemic disease. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene.

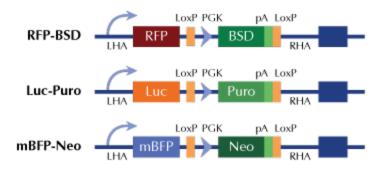
[provided by RefSeq, Jul 2011]





Product images:

Donor Vector Edited Chromosome



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