

## Product datasheet for RC202461L1

#### OriGene Technologies, Inc.

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## HIF-1 alpha (HIF1A) (NM\_001530) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: HIF-1 alpha (HIF1A) (NM\_001530) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: HIF-1 alpha

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

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

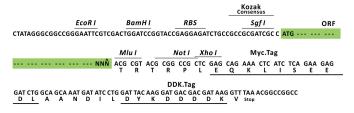
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC202461).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001530

ORF Size: 2478 bp



### HIF-1 alpha (HIF1A) (NM\_001530) Human Tagged Lenti ORF Clone - RC202461L1

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**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:** 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:** <u>NM 001530.2</u>

RefSeq Size: 3958 bp
RefSeq ORF: 2481 bp
Locus ID: 3091
UniProt ID: Q16665

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Cytogenetics: 14q23.2

**Domains:** PAS, HLH, PAC

**Protein Families:** Transcription Factors

**Protein Pathways:** mTOR signaling pathway, Pathways in cancer, Renal cell carcinoma

**MW:** 92.5 kDa

Gene 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

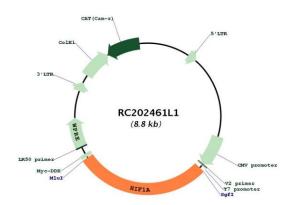
metabolic adaptation to hypoxia. HIF-1 thus plays an essential role in embryonic

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:**



Circular map for RC202461L1