

## **Product datasheet for TR517255**

## OriGene Technologies, Inc.

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## Hif1a Mouse shRNA Plasmid (Locus ID 15251)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Hif1a Mouse shRNA Plasmid (Locus ID 15251)

**Locus ID:** 15251

Synonyms: AA959795; bHLHe7; bHLHe78; HIF-1; HIF-1-alpha; HIF1; HIF1-alpha; HIF1alpha; MO; MOP1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Hif1a - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

15251). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC026139</u>, <u>NM 010431</u>, <u>NM 010431.1</u>, <u>NM 010431.2</u>

UniProt ID: Q61221

**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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).