

## **Product datasheet for TF508238**

## Hif1an Mouse shRNA Plasmid (Locus ID 319594)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Hif1an Mouse shRNA Plasmid (Locus ID 319594)

**Locus ID:** 319594

**Synonyms:** 2310046M24Rik; A830014H24Rik; FIH; FIH1

**Vector:** pRFP-C-RS (TR30014)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Components: Hif1an - Mouse, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 319594).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: <u>BC130013</u>, <u>NM 176958</u>, <u>NM 176958.1</u>, <u>NM 176958.2</u>, <u>NM 176958.3</u>, <u>BC060117</u>

UniProt ID: Q8BLR9

**Summary:** Hydroxylates HIF-1 alpha at 'Asn-799' in the C-terminal transactivation domain (CAD).

Functions as an oxygen sensor and, under normoxic conditions, the hydroxylation prevents

interaction of HIF-1 with transcriptional coactivators including Cbp/p300-interacting

transactivator. Involved in transcriptional repression through interaction with HIF1A, VHL and histone deacetylases. Hydroxylates specific Asn residues within ankyrin repeat domains (ARD) of NFKB1, NFKBIA, NOTCH1, ASB4, PPP1R12A and several other ARD-containing proteins. Also hydroxylates Asp and His residues within ARDs of ANK1 and TNKS2, respectively. Negatively regulates NOTCH1 activity, accelerating myogenic differentiation (By similarity). Positively regulates ASB4 activity, promoting vascular differentiation.[UniProtKB/Swiss-Prot Function]

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>.



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## 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).