

Product datasheet for **MG225292**

Hif1an (NM_176958) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hif1an (NM_176958) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Hif1an
Synonyms:	2310046M24Rik; A830014H24Rik; FIH; FIH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225292 representing NM_176958 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCGACGGCAGCCGAGGTTGCGGCCTCTGGCTCTGGAGAGGCCCGGAAGAAGCCGAAGCTCCGG
GTCCCGCCTGGGATGAGTCCCAGCTACGAAGTTACAGCTTCCGACCAGGCCATCCCACGCTGAGCCA
GAGTGACCCTCGGGCGGAAGAGCTCATGAAAAAGAGGAGCCAGTGGTGTGACCGACACAAACCTTGTG
TATCCTGCACTGAAGTGGACCTCGAATACCTGCAAGAGAATATTGGCAACGGAGATTTCTGTGTACA
GTGCCAGCACCCATAAGTTCTTACTATGATGAGAAGAAGATGGCAATTTCCAGAACTTAAGCCAAG
GTCCAACAGGGAGGAAATTAATTTTCATGAGTTCGTTGAGAACTACAAGCTATACAGCAGCGCGGGGA
GAAGAGCGGTTGTATCTGCAGCAGACACTCAATGACACCGTGGGAGGAAGATTGTCATGGACTTCTTGG
GTTTTAACTGGAAGTGGATCAATAAACAGCAGGGGAACTCGGCTGGGGCAGCTGACCTCTAACCTGTT
GCTCATTGGCATGGAAGGAAATGTGACACCTGCTCACTATGATGAGCAGCAGAAGCTTTTTGCCAAATA
AAAGGCCATAAGAGATGCATCTTATTTCCCGGATCAGTTCGAGTGCCTCTATCCATACCTGTCCATC
ACCCCTGTGACAGGCAGAGCCAGGTGGACTTTGACAATCCTGACTACGAGAGGTTCCCAATTTCCGAAA
TGTGGTTGGTTATGAGACAGTGGTTGGCCCTGGGGATGTTCTTTACATCCAATGTAAGTGGCACCAT
ATAGAGTCATTACTAAATGGGGGAATTACCATCACTGTGAACCTTGGTATAAGGGGGCTCCACCCCTA
AGAGAATCGAATATCCTCTCAAAGCTCATCAGAAAGTAGCCATCATGAGAAACATTGAGAAGATGCTTGG
AGAGGCCCTTGGGAACCCACAAGAGGTGGGCCTTTGTTGAACCATGATTAAGGCCGTTACAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG225292 representing NM_176958
 Red=Cloning site Green=Tags(s)

MAATAAEVAASGSGEAREEEAEPGPAWDESQLRSYSFPTRPIPRLSQSDPRAEELIENEPPVLTDTNLV
 YPALKWDLEYLQENIGNGDFSVYSASTHKFLYDEKMGNFQNFKPRSNREEIKFHEFVEKLQAIQQRGG
 EERLYLQQTLDNTVGRKIVMDFLGFNWNWINKQQGKLGWGLTSLNLLIGMEGNVTPAHYDEQQNFFAQI
 KGHKRCILFPPDQFECLYPYPVHHPCDRQSQVDFDNDPYERFPNFRNVVGYETVVGPGDVLVYIPMYWVHH
 IESLLNGGITITVNFWYKGAPTPKRIEYPLKAHQKVAIMRNIEKMLGEALGNPQEVGPLLNTMIKGRYN

TRTRPLE - GFP Tag - V

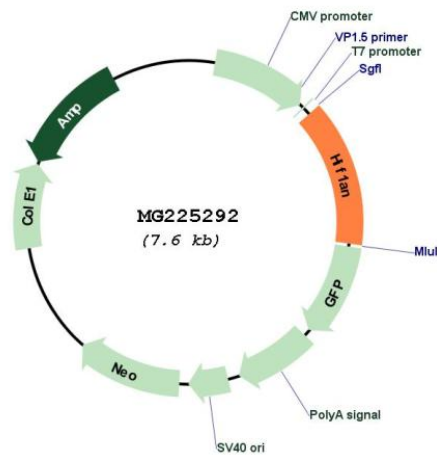
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_176958

ORF Size: 1047 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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: [NM_176958.3](#), [NP_795932.2](#)

RefSeq Size: 6190 bp

RefSeq ORF: 1050 bp

Locus ID: 319594

UniProt ID: [Q8BLR9](#)

Cytogenetics: 19 C3

Gene 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]