

## Product datasheet for **RC202843**

### HIF1AN (NM\_017902) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HIF1AN (NM\_017902) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** HIF1AN  
**Synonyms:** FIH1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC202843 ORF sequence  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGGCGGCGACAGCGCGGAGGCTGTGGCCTCTGGCTCTGGAGAGCCCCGGGAGGAGGCTGGAGCCCTCG  
GCCCGCCTGGGATGAATCCCAGTTGCGCAGTTATAGCTTCCCGACTAGGCCATTCCGCGTCTGAGTCA  
GAGCGACCCCGGCAGAGGAGCTTATTGAGAATGAGGAGCCTGTGGTCTGACCGACACAAATCTTG  
TATCCTGCCCTGAAATGGGACCTTGAATACCTGCAAGAGAATATTGGCAATGGAGACTTCTGTGTACA  
GTGCCAGCACCCACAAGTTCTTGTACTATGATGAGAAGAAGATGGCCAATTTCCAGAACTTAAGCCGAG  
GTCCAACAGGGAAGAAATGAAATTTTCATGAGTTGTTGAGAACTGCAGGATATACAGCAGCGAGGAGGG  
GAAGAGAGTTGTATCTGCAGCAACGCTCAATGACACTGTGGCAGGAAGATTGTCATGGACTTCTTAG  
GTTTTAACTGGAAGTAAATAAGCAACAGGAAAGCGTGGCTGGGGGCGACTTACCTCTAACCTGCT  
GCTCATTGGCATGGAAGGAAATGTGACACCTGCTCACTATGATGAGCAGCAGAAGTCTTCTGCTCAGATA  
AAAGGTTACAACGATGCATCTTATCCCTCCGGATCAGTTTCGAGTGCCTCTACCCATACCTGTTTCATC  
ACCCATGTGACAGACAGAGCCAGGTGGACTTTGACAATCCCGACTACGAGAGGTTCCCTAATTTCCAAAA  
TGTGGTTGGTTACGAAACAGTGGTTGGCCCTGGTGATGTTCTTTACATCCAATGTAAGTGGTGGCAGC  
ATAGAGTCATTACTAAATGGGGGATTACCATCACTGTGAATCTGGTATAAGGGGGCTCCACCCCTTA  
AGAGAATTGAATATCCTCTCAAAGCTCATCAGAAAGTGGCCATAATGAGAAACATTGAGAAGATGCTTGG  
AGAGGCCCTTGGGAACCCACAAGAGGTGGGGCCCTTGTGAACACAATGATCAAGGGCCGATACAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC202843 protein sequence  
 Red=Cloning site Green=Tags(s)

MAATAAEAVASGSGEPREEAGALGPAWDESQLRSYSFPTRPIPRLSQSDPRAEELIENEPPVLTDTNLV  
 YPALKWDLEYLQENINGDFS SVYSASTHKFLYDEKMANFQNFKPRSREEMKFHEFVEKLQDIQQRGG  
 EERLYLQQLNDTVGRKIVMDFLGFNWNWINKQQGKRGWGLT SNLLLIGMEGNVTPAHYDEQQNFFAQI  
 KGYKRCILFPPDQFECLYPYPVHHPCDRQSQVDFDNDPYERFPNFPQNVVGYETVVGPGDVL YIPMYWVHH  
 IESLLNGGITITVNFWYKGAPTPKRIEYPLKAHQKVAIMRNIKMLGEALGNPQEVGPLLNTMIKGRYN

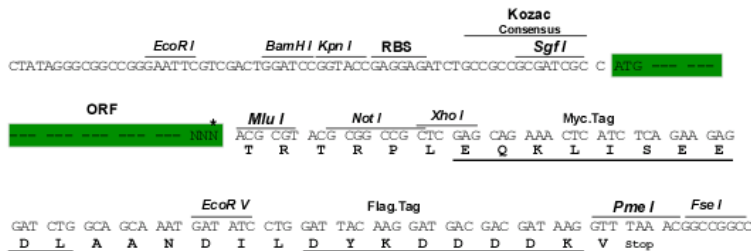
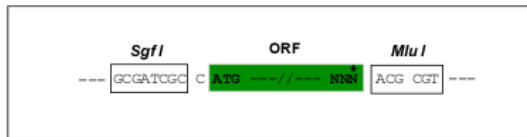
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6076\\_f08.zip](https://cdn.origene.com/chromatograms/mk6076_f08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_017902

**ORF Size:** 1047 bp

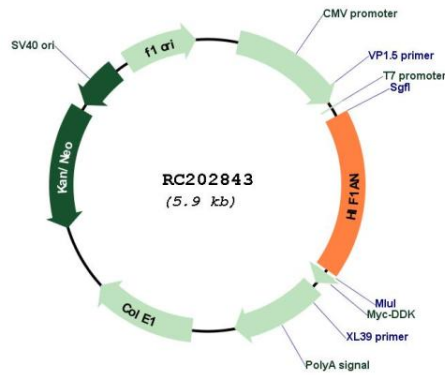
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

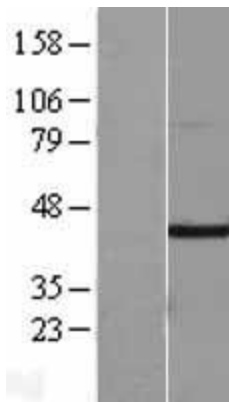
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_017902.3</u>
<b>RefSeq Size:</b>	6928 bp
<b>RefSeq ORF:</b>	1050 bp
<b>Locus ID:</b>	55662
<b>UniProt ID:</b>	<u>Q9NWT6</u>
<b>Cytogenetics:</b>	10q24.31
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	40.3 kDa
<b>Gene Summary:</b>	Hydroxylates HIF-1 alpha at 'Asn-803' 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. Positively regulates ASB4 activity, promoting vascular differentiation.[UniProtKB/Swiss-Prot Function]

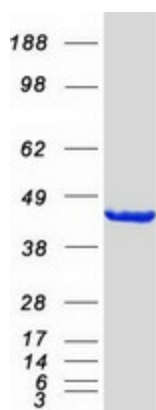
Product images:



Circular map for RC202843



Western blot validation of overexpression lysate (Cat# [LY402628]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202843 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HIF1AN protein (Cat# [TP302843]). The protein was produced from HEK293T cells transfected with HIF1AN cDNA clone (Cat# RC202843) using MegaTran 2.0 (Cat# [TT210002]).