

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)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCACAGCGCGGAGGCTGTGGCCTCTGGCTCTGGAGAGCCCCGGGAGGAGGCTGGAGCCCTCG
GCCCGCCTGGGATGAATCCCAGTTGCGCAGTTATAGCTTCCCGACTAGGCCATTCCGCGTCTGAGTCA
GAGCGACCCCGGCAGAGGAGCTTATTGAGAATGAGGAGCCTGTGGTCTGACCGACACAAATCTTG
TATCCTGCCCTGAAATGGGACCTTGAATACCTGCAAGAGAATATTGGCAATGGAGACTTCTGTGTACA
GTGCCAGCACCCACAAGTTCTTGTACTATGATGAGAAGAAGATGGCCAATTTCCAGAACTTAAGCCGAG
GTCCAACAGGGAAGAAATGAAATTTTCATGAGTTGTTGAGAACTGCAGGATATACAGCAGCGAGGAGGG
GAAGAGAGTTGTATCTGCAGCAACGCTCAATGACACTGTGGCAGGAAGATTGTCATGGACTTCTTAG
GTTTTAACTGGAAGTAAATAAGCAACAGGAAAGCGTGGCTGGGGCAGCTTACCTCTAACCTGCT
GCTCATTGGCATGGAAGGAAATGTGACACCTGCTCACTATGATGAGCAGCAGAAGCTTTTTGCTCAGATA
AAAGGTTACAACGATGCATCTTATCCCTCCGGATCAGTTTCGAGTGCCTCTACCCATACCTGTTTCATC
ACCCATGTGACAGACAGAGCCAGGTGGACTTTGACAATCCCGACTACGAGAGGTTCCCTAATTTCCAAAA
TGTGGTTGGTTACGAAACAGTGGTTGGCCCTGGTGATGTTCTTTACATCCAATGTAAGTGGCAGTAC
ATAGAGTCATTACTAAATGGGGGATTACCATCACTGTGAATCTGGTATAAGGGGGCTCCACCCCTTA
AGAGAATTGAATATCCTCTCAAAGCTCATCAGAAAGTGGCCATAATGAGAAACATTGAGAAGATGCTTGG
AGAGGCCCTGGGAACCCACAAGAGGTGGGGCCCTTGTGAACACAATGATCAAGGGCCGATACAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

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

MAATAAEAVASGSGEPREEAGALGPAWDESQLRSYSFPTRPIPRLSQSDPRAEELIENEPPVLTDTNLV
 YPALKWDLEYLQENIGNGDFSVYSASTHKFLYDEKKMANFQNFKPRSREEMKFHEFVEKLQDIQQRGG
 EERLYLQQLNDTVGRKIVMDFLGFNWNWINKQQGKRGWGQLTNSLLLIGMEGNVTPAHYDEQQNFFAQI
 KGYKRCILFPPDQFECLYPYPVHHPCDRQSQVDFDNDPYERFPNFPQNVVGYETVVGPGDVLVYIPMYWVHH
 IESLLNGGITITVNFWYKGAPTPKRIEYPLKAHQKVAIMRNIKMLGEALGNPQEVGPLLNTMIKGRYN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6076_f08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

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_017902.3](#)

RefSeq Size: 6928 bp

RefSeq ORF: 1050 bp

Locus ID: 55662

UniProt ID: [Q9NWT6](#)

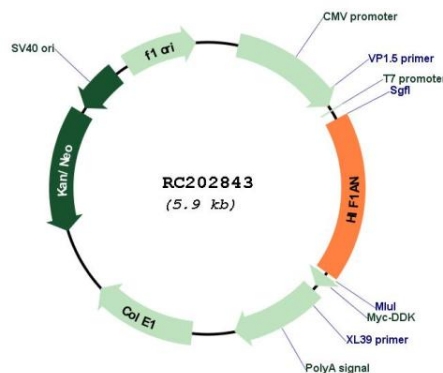
Cytogenetics: 10q24.31

Protein Families: Druggable Genome

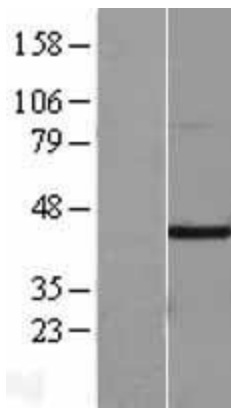
MW: 40.3 kDa

Gene Summary: 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]

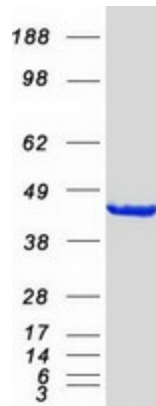
Product images:



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]).