

Product datasheet for **SC110606**

HIF3 alpha (HIF3A) (NM_152795) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HIF3 alpha (HIF3A) (NM_152795) Human Untagged Clone
Tag:	Tag Free
Symbol:	HIF3 alpha
Synonyms:	bHLHe17; HIF-3A; HIF3-alpha-1; IPAS; MOP7; PASD7
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_152795 edited
CCGAGGGCTCCGGAGCGGCGACTGGCGAGCCATGGCGCTGGGGCTGCAGCGCGCAAGGTC
GACCACGGAGCTGCGCAAGGAAAAGTCCCAGGATGCGGCCCGCAGCCGGCGCAGCCAGGA
GACCGAGGTGCTGTACCAGCTGGCTCACACGCTGCCCTTCGCCCGCGGGCTCAGCGCCCA
CCTGGACAAGGCCTCTATCATGCGCCTCACCATCAGCTACCTGCGCATGCACCGCCTCTG
CGCCGCAGGGGAGTGGAACCAAGTGGGAGCAGGGGAGAACTGGATGCCTGTACCTGTC
GAAGGCCCTGGAGGGCTTCGTCATGGTGCTCACCGCCGAGGGAGACATGGCTTACCTGTC
GGAGAATGTCAGCAAACACCTGGGCCTCAGTCAGCTGGAGCTCATTGGACACAGCATCTT
TGATTTTACACCCCTGTGACCAAGAGGAGCTTCAGGACGCCCTGACCCCCAGCAGAC
CCTGTCCAGGAGGAAGGTGGAGGCCCCACGGAGCGGTGCTTCTCCTTGCAGCATGAAGAG
TACGCTCACCAGCCGCGGGCGCACCCCTCAACCTCAAGGCGGCCACCTGGAAGGTGCTGAA
CTGCTCTGGACATATGAGGGCTACAAGCCACCTGCGCAGACTTCTCCAGCTGGGAGCCC
TGACTCAGAGCCCCGCTGCAGTGCCTGGTGCTCATCTGCGAAGCCATCCCCACCCAGG
CAGCCTGGAGCCCCACTGGGCCGAGGGCCTTCTCAGCCGCCACAGCCTGGACATGAA
GTTACCTACTGTGACGACAGGATTGCAGAAGTGGCTGGCTATAGTCCCGATGACCTGAT
CGGCTGTTCCGCCTACGAGTACATCCACGCGCTGGACTCCGATGCGGTACGAAGAGCAT
CCACACCTTGCTGAGCAAGGGCCAGGCAGTAACAGGGCAGTATCGCTTCCTGGCCCGGAG
TGGTGGCTACCTGTGGACCCAGACCCAGGCCACAGTGGTGTGAGGGGACGGGGCCCCCA
GTCGGAGAGTATCGTCTGTGTCCATTTTTAATCAGCCAGGTGGAAGAGACCCGAGTGGT
GCTGTCCCTGGAGCAAACGGAGCAACACTCTCGCAGACCCATTACGCGGGGCGCCCCCTC
TCAGAAGGACACCCTAACCTGGGGACAGCCTTGACACCCTGGCCCCGGATCCTTGTG
CTTCTGCACCCGCTTCCCTGAGCGAGGCTGCCCTGGCCGCTGACCCCCGCGTTTCTG
CAGCCCTGACCTCCGTCGCCTCCTGGGACCCATCCTGGATGGGGCTTTCAGTAGCAGCCAC
TCCCAGCACCCCGCTGGCCACACGGCACCCCAAGTCCTCTTTTCGGCTGATCTCCAGA
TGAACCTGTGGGCACCGAGAATGTGCACAGACTTTCACCTCCGGGAAAGACTGA
GGCAGTGGAGACAGATTTAGATATAGCTCAGGATGCTGATGCTCTGGATTTGGAGATGCT
GGCCCCCTACATCTCCATGGATGATGACTTCCAGCTCAACGCCAGCGAGCAGCTACCCAG
GGCCTACCACAGACCTCTGGGGGCTGTCCCCGGCCCCGTGCTCGGAGCTTCCATGGCCT
GTCACCTCAGCCCTTGAGCCCTCCCTGCTACCCCGCTGGGGGAGTGACCCCCGGCTGAG
CTGCTCCAGCCCTTCCAGAGGGGACCCCTCAGCATCCTCTCCATGGCTGGGGCTCGGAA
GAGGACCCTGGCCAGAGCTCAGAGGACGAGGACGAGGGAGTGGAGCTGCTGGGAGTGG
ACCTCCCAAAAAGTCCCCAGCCAGAACACGAAAACCTTTCTGCTCTTCTCCTCAGCCT
GAGTTTCTTCTGACAGGAGGACAGCCCAAGGGAGCCTGCAGGACCCAGCACCCTCACT
CCTGAACCTGAATGAGCCCTGGGCTGGGCCCTCACTGCTCTCTCCGTACTCAGACGA
GGACACTACCCAGCCCGGGGCCCTTCCAGCCAAGGGCAGGCTCAGCCAGGCTGACTG
AGCCGGCTCCTCTCCCCATCTGCCTTCTCCTCCCCAGAAAGGACCTCAACCACACTCCA
CGCCGGCAGCCAACGCACAGGATGGGGGCGCCAGGAGAGGGGCCCTCTCTCCTATGT
ACCCCTGCCCACCTCGGGCCTACCTCAGCCCTCACCCTCTGCCTGCTCCCAATCTGGG
GGCTCTCTGGGGTGGTCTCAGCTCAGTGACCTCTGGGAGGTGGTCCCTGGCCCCCTCCTC
CTTCTCTCAGGATTTCTTTGGGGTTCTCAATACTTGGTTACCTATTATCCCTTTCTCT
GCCTCTTTGGCTTTATTTGGGAATCAGGGGTGAGGAGGGTTGGGGGGTTCATATCTG
TGTTTCCAGTTCGGGGAGAACAATGATCCACGGGTCAACGTGATCACATTTCTTCTA
AAAAAAAAAAAAAAAAAAAA
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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_152795 unedited
GCATTTTGTAAATACGACTCACTATTAGGGCGGCCGCGATTTCGGCACGAGGCCGAGGGCTC
CGGAGCGGCGACTGGCGAGCCATGGCGCTGGGGCTGCAGCGCGCAAGGTCGACCACGGAG
CTGCGCAAGGAAAAGTCCCGGATGCGGCCCGCAGCCGGCGCAGCCAGGAGACCGAGGTG
CTGTACCAGCTGGCTCACACGCTGCCCTTCGCCCGCGCGTACGCGCCACCTGGACAAG
GCCTCTATCATGCGCCTACCATCAGCTACCTGCGCATGCACCGCCTCTGCGCCGACGGG
GAGTGGAACACAGGTGGGAGCAGGGGAGAACACTGGATGCCTACCTGAAGGCCCTG
GAGGGCTTCGTTCATGGTGTCCACCGCCGAGGGAGACATGGCTTACCTGTGCGAGAATGTC
AGCAAACACCTGGGCCTCAGTCAGCTGGAGCTCATTGGACACAGCATCTTTGATTTTCATC
CACCCCTGTGACCAAGAGGAGCTTCAGGACGCCCTGACCCCCAGCAGACCCTGTCCAGG
AGGAAGGTGGAGGCCCCACGGAGCGGTGCTTCTCCTTGCGCATGAAGAGTACGCTCACC
AGCCGCGGGCGCACCCCTCAACCTCAAGGCGGCCACCTGGAAGGTGCTGAACTGCTCTGGA
CATATGAGGGCCTACAAGCCACCTGCGCAGACTTCTCCAGCTGGGAGCCCTGACTCAGAG
CCCCCGCTGCAGTGCCTGGTGTCTATCTCGAAGCCATCCCCACCCAGGCAGCCTGGAG
CCCCACTGGGGCCGAGGGCCTTCTCAGCCGCCAGCCTGACATGAAGTCACCTACTGT
GACACAGGATTGAGAAGTGCTGGCTTAGTCCGATGACTGATCGCTGNTCGNCTACAGTA
CTNCCGCGCTGACTCGATGCGTCAGCAGACATTACACTGCTGACAGGGCCAGCATAACAG
GCATATCGTTCTGGCCGGAGTGTGGTACTGG
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3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_152795 unedited
ATGGACCCGCGGCCGCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTTTGTAGAAGGAAATG
TGATCACGTTGACCCGTGGATCATTGTTCTCCCCANAACCTGGAACACAGATATGACCC
CCCCAACCTCCTCACCCCTGATCCCCAAAATAAAGCCAAGAGAGGCAGAGAAAGGGAT
AATGAGGTAACCAAGTATTGAGAACCCCAAGAGAAATCCTGAGAGAAGGAGGAGGGGGCC
AGGGACCACCTCCAGAGGTCACTGAGCTGAGACCACCCAGAGAGCCCCAGATTGGGA
GCAGGCAGAGGGGTGAGGGCTGAGGTAGGCCGAGGTGGGAGGGGGTACATAGAGGAGA
GAGGGGCCCTCTCCTGGCGCCCCATCCTGTGCGTTGGCTGCCGGCGTGGAGTGTGGTT
GAGGTCCTTTCTGGGGGAGGAGAAGGCAGATGGGGAGAGGAGCCGGCTCAGTCAGCCTGG
GCTGAGCCTGCCCTTGGCTGGAAGGGGCCCCCGGGCTGGGTAGTGTCTCGTCTGAGTAC
GGAGAGAGCAGTGAGGGGCCAGGCCAGGGGCTATTGAGTTTCAAGAGTGGGGTGTCTG
GGTCCTGCAGGCTCCCTGGGGCTGGTCTCCTGTCAGAAGGAACTCAGGCTGAGAGGA
AAGAGCAGAAAGTTTTCTGTGTTCTGGGCTGGGGACCTTTTGGGAGGTCTCACTCCCAGC
AGCTCCACTCCCTCGTCTCTGCTCTGAGCTCTGGGCCAGGGTCTCTCCGAGCCCCA
NCCATGGGAGAGGATGCTGAGGGTCCCCTCTGGGAGGACTGGAGCAGCTCANCCGGGG
TCACTCCCAGCGGGGTAGCAGGGNAGGGCTCAGGGGCTGNAGTGACAAGCCATGGAAGC
TCCGAGCACGGGGCGGGGGACAGCCCCANAGGTCTGTGGGAAGCCCTGGGTAGCTGCTC
NCTTGCTTGTAGCTGGAAGTCTCATTTCATGGAGATTAGGGGGCCGCATCTCC
```

Restriction Sites:

NotI-NotI

ACCN:

NM_152795

Insert Size:

2500 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_152795.1](#), [NP_690008.1](#)

RefSeq Size: 2090 bp

RefSeq ORF: 1899 bp

Locus ID: 64344

UniProt ID: [Q9Y2N7](#)

Cytogenetics: 19q13.32

Domains: PAS, HLH

Protein Families: Druggable Genome, Transcription Factors

Gene Summary:

The protein encoded by this gene is the alpha-3 subunit of one of several alpha/beta-subunit heterodimeric transcription factors that regulate many adaptive responses to low oxygen tension (hypoxia). The alpha-3 subunit lacks the transactivation domain found in factors containing either the alpha-1 or alpha-2 subunits. It is thought that factors containing the alpha-3 subunit are negative regulators of hypoxia-inducible gene expression. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Mar 2011]

Transcript Variant: This variant (3) encodes the longest isoform (c). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.