

Product datasheet for **SC110883**

HIF 2 alpha (EPAS1) (NM_001430) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HIF 2 alpha (EPAS1) (NM_001430) Human Untagged Clone
Tag:	Tag Free
Symbol:	HIF 2 alpha
Synonyms:	bHLHe73; ECYT4; HIF2A; HLF; MOP2; PASD2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF:

>OriGene sequence for NM_001430 edited

```

CCCCCGGGCCGCGGGGAGCGGACGAGGGCCACAGCCCCCACCAGCCAGGGAGCCAG
GTGCTCGGCGTCTGAACGTCTCAAAGGGCCACAGCGACAATGACAGCTGACAAGGAGAAG
AAAAGGAGTAGCTCGGAGAGGAGGAAGGAGAAGTCCCGGATGCTGCGCGGTGCCGGCGG
AGCAAGGAGACGGAGGTGTTCTATGAGCTGGCCATGAGCTGCCTCTGCCCCACAGTGTG
AGCTCCCATCTGGACAAGGCCTCCATCATGCGACTGGCAATCAGCTTCTGCGAACACAC
AAGCTCCTCTCCTCAGTTTGCTCTGAAAACGAGTCCGAAGCCGAAGCTGACCAGCAGATG
GATAACTTGTACCTGAAAGCCTTGGAGGGTTTCATTGCCGTGGTGACCCAAGATGGCGAC
ATGATCTTTCTGTGAGAAAACATCAGCAAGTTCATGGGACTTACACAGGTGGAGCTAACA
GGACATAGTATCTTTGACTTCACTCATCCCTGCGACCATGAGGAGATTTCGTGAGAACCTG
AGTCTCAAAAATGGCTCTGGTTTTGGGAAAAAAGCAAAGACATGTCCACAGAGCGGGAC
TTCTTCATGAGGATGAAGTGCACGGTCACCAACAGAGGCCGACTGTCAACCTCAAGTCA
GCCACCTGGAAGGTCTTGCACTGCACGGCCAGGTGAAAGTCTACAACAACCTGCCCTCT
CACAATAGTCTGTGTGGCTACAAGGAGCCCTGCTGCTCCTGCCTCATCATGTGTGAA
CCAATCCAGCACCCATCCACATGGACATCCCCCTGGATAGCAAGACCTTCTGAGCCGC
CACAGCATGGACATGAAGTTCACCTACTGTGATGACAGAATCACAGAACCTGATTGTTAC
CACCTGAGGAGCTGCTTGGCCGCTCAGCCTATGAATTCTACCATGCGCTAGACTCCGAG
AACATGACCAAGAGTACCAGAACTTGTGCACCAAGGGTCAGGTAGTAAGTGGCCAGTAC
CGGATGCTCGCAAAGCATGGGGCTACGTGTGGCTGGAGACCCAGGGGACGGTCACTAC
AACCTCGCAACCTGCAGCCCCAGTGCATCATGTGTGCAACTACGTCTGAGTGAGATT
GAGAAGAATGACGTGGTGTCTCCATGGACCAGACTGAATCCCTGTTCAAGCCCCACCTG
ATGGCCATGAACAGCATCTTTGATAGCAGTGGCAAGGGGGTGTGTCTGAGAAGAGTAAC
TTCTATTCCACCAAGCTAAAGGAGGAGCCCGAGGAGCTGGCCAGCTGGCTCCACCCCA
GGAGACGCCATCATCTCTCTGGATTTCCGGGAATCAGAACTTCGAGGAGTCTCAGCCTAT
GGCAAGGCCATCTGCCCCGAGCCAGCCATGGGCCACGGAGTTGAGGAGCCACAGCACC
CAGAGCGAGGCTGGGAGCCTGCCTGCCTTACCCTGCCCCAGGCAGCTGCCCCGGGCAGC
ACCACCCCAAGTCCACCAGCAGCAGCAGCAGCTGCTCCACGCCAATAGCCCTGAAGAC
TATTACACATCTTTGGATAACGACCTGAAGATTGAAGTATTGAGAAGCTCTTCGCCATG
GACACAGAGGCCAAGGACCAATGCAGTACCCAGACGGATTTCAATGAGCTGGACTGGAG
ACACTGGCACCCTATATCCCATGGACGGGGAAGACTTCCAGCTAAGCCCCATCTGCCCC
GAGGAGCGGCTCTTGGCGGAGAACCACAGTCCACCCCAAGCACTGCTTCAAGTCCATG
ACAACATCTTCCAGCCACTGGCCCTGTAGCCCGCACAGTCCCTTCTCCTGGACAAG
TTTCAGCAGCAGCTGGAGAGCAAGAAGACAGAGCCCGAGCACCGCCCATGTCCTCCATC
TTCTTTGATGCCGGAAGCAAAGCATCCCTGCCACCGTGTGTGGCCAGGCCAGCACCCT
CTCTCTTCCATGGGGGAGATCCAATACCCAGTGGCCCCAGATCCACCATTACATTTT
GGGCCCACAAAGTGGGCCGTGCGGGATCAGCGCACAGAGTTCTTGGGAGCAGCGCCGTTG
GGGCCCCCTGTCTTCCACCCATGTCTCCACCTTCAAGACAAGGTCTGCAAAGGTTTTT
GGGGCTCGAGGCCAGACGTGCTGAGTCCGGCCATGGTAGCCCTCTCAACAAGCTGAAG
CTGAAGCGACAGCTGGAGTATGAAGAGCAAGCCTTCCAGGACCTGAGCGGGGGGACCCA
CTGGTGGCAGCACCTCACATTTGATGTGGAACGGATGAAGAACCTCAGGGGTGGGAGC
TGCCCTTTGATGCCGGACAAGCCACTGAGCGCAAATGTACCCAATGATAAGTTACCCAA
AACCCATGAGGGGCTGGGCCATCCCCTGAGACATCTGCCGCTGCCACAGCCTCCATCT
GCCATCAGTCCCGGGGAGAACAGCAAGAGCAGGTTCCCCCACAGTGCTACGCCACCCAG
TACCAGGACTACAGCCTGTGCTCAGCCACAAGGTGTCAGGCATGGCAAGCCGGTGTCTC
GGGCCCTCATTTGAGTCTACCTGCTGCCCGAAGTACCAGATATGACTGTGAGGTGAAC
GTGCCCGTGTGGGAAGCTCCACGCTCCTGCAAGGAGGGGACCTCCTCAGAGCCCTGGAC
CAGGCCACCTGAGCCAGGCTTCTACCTGGGCAGCACCTCTGCCAGCCGTCACCCAG
CTTCACTCTCCTGCTGTTTTGCAACTAGGTATTTCTAACGCCAGCACAC

```

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001430 unedited
 CCCAATCGCCGCCGTTGCCGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAA
 GCAGAGTTCATTTAGGTGACACTATAGAATACAAGCTACTTGTTCTTTTTGCAGCGGCCG
 CGAATTCGGCACGAGGGCCACACGGGTCCGGTGCCCGCTGCGCTCCGCCCCAGCGCTCC
 TGAGGCGGCCGTACAATCCTCGGCAGTGTCTGAGACTGTATGGTCAGCTCAGCCCGGCC
 TCCGACTCCTTCCGACTCCAGCATTGAGCCACTTTTTTTTTCTTTGAAAACTCAGAAA
 AGTGACTCCTTTCCAGGGAAAAAGGAACTTGGGTTCCCTTCTCTCCGTCCTTTTTCGG
 GTCTGACAGCCTCCACCCACTCCTTCCCGGACCCCGCCTCCGCGCGCAGGTTCTCCCA
 GTCACCTTTCTCCACCCCGCCCGCACCTAGCCCGCCGCGCGCCACCTTCCACCTGAC
 TGCGCGGGGCGCTCGGGACCTGCGCGCACCTCGGACCTTACCACCCCGCCGGGCGCGG
 GGAGCGGACGAGGGCCACAGCCCCACCCGCCAGGGAGCCAGGTGCTCGGCGTCTGAA
 CGTCTCAAAGGGCCACAGCGACAATGACAGCTGACCAGGAGAAGACAAGGAGTAGCTCGG
 AGAGGTAGAAGGAGAAGTCCCTGGATGCTGCGCGGTGCCTGCCGAGCAGGAGACGGAGG
 TGTTCTATGAGCTGGCCATGAGCTGCCTTGCCTCCACAGTGTGAGCTCCCATCTGGACC
 AGGTCTCCATCATGCGACTGGCAATCAGTTTCTGGGACACACAGCTCCTCTCTCAGAT
 TGCTCTGAAAACGAGTCCGAAGCCCGAGCTGACCACCAGAGGGATAACTTGTACCTGAAG
 CCTTTGAAGTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001430 unedited
 CACTGGGGCAGGGGTACACAGGGCATGCCACCCGGTTCTGTTTCAGGAAACAGCTATGA
 CCGCGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTAGGATCAAGATACTTTAA
 TAAGATACCAGTGTCAAATACATTTCTTATAAAGTTAAGCTCCCATACAGTTATAATG
 TTGTCTGTTGGAATTCGACAATAATAACGTTTATGAAATCGTTACGTTGACAGGTAGG
 GTTAATATGAAGCTTGAATATTTTTTCAAGTGTGTTTGTAGTAAAAGTCAAGGGTAAAATGCC
 CTTAATGCCAGGGCAACACACAGGAAATCAAATACCAGCATTACACGTGAGTAAACC
 TTCAAGTTCTGCCACCCTGTGTGGGTAATGCCGTGCAGCTAAAATATGATTTACGCAAC
 ACCATGACTAAGGAATTTCTCATAGAACTTAAATTTCTTTTGAAGCTATTTTTGTGTTT
 TGGCAATAAGTCTATCCGGGCTTACTAAATAGTTGGCCAATGTGCTTTGTGTGTTTT
 TAGAAAATTCTTATTGTACCCATTACAGAAAAGTTCCATGTTATTGGTATTGAAAAACC
 AGAGGTGTCGTCCTCTTACCCAGGGAGTTGCAAAGTGTCTGGGAACACTATTTTCAGT
 GCTTCTACCTACATGTCACTGACCGACCCATAGACCTCAGCCAGGGCCTGTGGTAGGG
 GCCATCCCTGGAAGCCTTGGGGCCATCTGCCTGCCGGCTGAATGGGGGTGCAGGGCTG
 GTCTTGGACAGCTGCTCTCCCGTTGTGACGCTTCTTCTAAGTCCACCTCCAGGGCTCC
 AAGGTCTGAAGTTGAAAGN

Restriction Sites:

NotI-NotI

ACCN:

NM_001430

Insert Size:

5500 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](#)

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_001430.3](#), [NP_001421.2](#)

RefSeq Size: 5186 bp

RefSeq ORF: 2613 bp

Locus ID: 2034

UniProt ID: [Q99814](#)

Cytogenetics: 2p21

Domains: PAS, HLH, PAC

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Pathways in cancer, Renal cell carcinoma

Gene Summary: This gene encodes a transcription factor involved in the induction of genes regulated by oxygen, which is induced as oxygen levels fall. The encoded protein contains a basic-helix-loop-helix domain protein dimerization domain as well as a domain found in proteins in signal transduction pathways which respond to oxygen levels. Mutations in this gene are associated with erythrocytosis familial type 4. [provided by RefSeq, Nov 2009]