

Product datasheet for **RG208604**

HIF 2 alpha (EPAS1) (NM_001430) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HIF 2 alpha (EPAS1) (NM_001430) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HIF 2 alpha
Synonyms:	bHLHe73; ECYT4; HIF2A; HLF; MOP2; PASD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG208604 representing NM_001430
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACAGCTGACAAGGAGAAGAAAAGGAGTAGCTCGGAGAGGAGGAAGGAGAAGTCCCGGATGCTGCGC
 GGTGCCGCGGAGCAAGGAGACGGAGGTGTTCTATGAGCTGGCCATGAGCTGCCTCGCCACAGTGT
 GAGCTCCCATCTGGACAAGGCCTCCATCATGCGACTGGCAATCAGCTTCCTGCGAACACACAAGCTCCTC
 TCCTCAGTTTGTCTGAAAACGAGTCCGAAGCCGAAGCTGACCAGCAGATGGACAACCTTGTACCTGAAAAG
 CCTTGGAGGGTTTCATTGCCGTGGTGACCAAGATGGCGACATGATCTTTCTGTGAGAAAACATCAGCAA
 GTTCATGGGACTTACACAGGTGGAGCTAACAGGACATAGTATCTTTGACTTCACTCATCCCTGCGACCAT
 GAGGAGATTCTGTGAGAACCTGAGTCTCAAAAATGGCTCTGGTTTTGGGAAAAAAGCAAAGACATGTCCA
 CAGAGCGGGACTTCTTCATGAGGATGAAGTGCACGGTCACCAACAGAGGCCGACTGTCAACCTCAAGTC
 AGCCACCTGGAAGTCTTGCACCTGCACGGGCCAGGTGAAAGTCTACAACAACCTGCCCTCCTCACAATAGT
 CTGTGTGGCTACAAGGAGCCCTGCTGTCTGCCTCATCATCATGTGTGAACCAATCCAGACCCATCCC
 ACATGGACATCCCCCTGGATAGCAAGACCTTCTGAGCCGCCACAGCATGGACATGAAGTTCACCTACTG
 TGATGACAGAATCACAGAACTGATTGGTTACCACCCTGAGGAGCTGCTTGGCCGCTCAGCCTATGAATTC
 TACCATGCGCTAGACTCCGAGAACATGACCAAGAGTCACCAGAACCTTGTGCACCAAGGGTCAGGTAGTAA
 GTGGCCAGTACCGGATGCTCGCAAAGCATGGGGGCTACGTGTGGCTGGAGACCCAGGGGACGGTCATCTA
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 GACGTGGTGTCTCCATGGACCAGACTGAATCCCTGTTCAAGCCCCACCTGATGGCCATGAACAGCATCT
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 CGAGGAGCTGGCCAGCTGGCTCCACCCAGGAGACGCCATCATCTCTGTGATTCGGGAATCAGAAC
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 GGAAGACTTCAGCTAAGCCCCATCTGCCCGAGGAGCGGCTCTTGGCGGAGAACCACAGTCCACCCCC
 CAGCACTGCTTCACTGCCATGACAAACATCTTCCAGCCACTGGCCCTGTAGCCCGCACAGTCCCTTCC
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 AGGGGCCTGGGCCATCCCCTGAGACATCTGCCGCTGCCACAGCCTCCATCTGCCATCAGTCCCGGGGAGA
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 CAAGGTGTGAGCATGGCAAGCCGGCTGCTCGGGCCCTCATTTGAGTCTACCTGCTGCCGAACTGACC
 AGATATGACTGTGAGGTGAACGTGCCCGTGTGGGAAGCTCCACGCTCCTGCAAGGAGGGGACCTCTCA
 GAGCCCTGGACCAGGCCACC

ACGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG208604 representing NM_001430
 Red=Cloning site Green=Tags(s)

MTADKEKKRSSSERRKEKSRDAARCRRSKETEVFYELAHPLPHSVSSHLDKASIMRLAISFLRTHKLL
 SSVCSENESEAEADQQMDNLYLKALEGFI AVVTQDGMIFLSENI SKFMGLTQVELTGHSIFDFTHPCDH
 EEIRENLSLKNVSGFGKKSKDMSTERDFMFMKCTVTNRGRTVNLKSATWKVLHCTGQVKVYNNCPPHNS
 LCGYKEPLL SCL IIMCEPIQHPSHMDIPLDSKTFLSRHSMDMKFTYCDRITELIGYHPEELLGRSAYEF
 YHALDSENMTKSHQNLCTKGQVVSQYRMLAKHGGYVWLETQGTVIYNPRNLQPQCIMCVNYVLSIEKN
 DVVFSMDQTESL FFKPHLMAMNSIFDSSGKGAVSEKSNFLFTKLKEEPEELAQ LAPTPGD A IISLDFGNQN
 FEESAYGKAILPPSQPWATELRSHSTQSEAGSLPAFTVPQAAAPGSTTPSATSSSSCSTPNSPEDYYT
 SLDNDLKIEVIEKLFAMDTEAKDQCSTQTFNLDLETLAPYIPMDGEDFQLSPICPEERLLAENPQSTP
 QHCF SAMTNI FQPLAPVAPHSFLLDKFQQQLESKKTPEHRPMSSIFFDAGSKASLPPCCGQASTPLSS
 MGGRSNTQWPPDPPLHF GPTKWAVGDQRTEFLGAAPL GPPVSPPHVSTFKTRSAKGF GARGPDVLS PAMV
 ALSNKLKLRQLEYEEQAFQDL SGGDPPGGSTSHLMWKR MKNLRGGSCPLMPDKPL SANVPNDKFTQNP
 RGLGHPLRHLPLQPPSAISPGENSKSRFPQCYATQYQDYLS SAHKVSGMASRLLGPSFESYLLPELT
 RYDCEVNV PVLGSSTLLQGDDLRLALDQAT

TRTRPLE - GFP Tag - V

Restriction Sites:

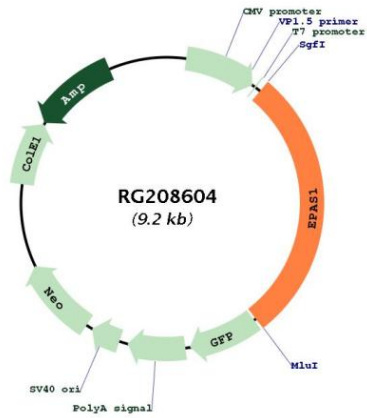
SgfI-MluI

Cloning Scheme:



ACCN:	NM_001430
ORF Size:	2610 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:	<ol style="list-style-type: none">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_001430.5
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]

Product images:



Circular map for RG208604