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Product datasheet for RC402571

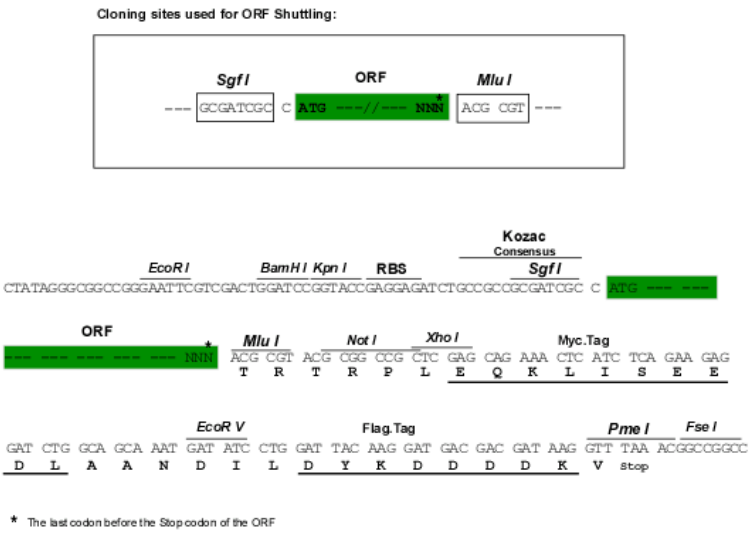
HIF-1 alpha (HIF1A) (NM_001530) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	HIF-1 alpha (HIF1A) (NM_001530) Human Mutant ORF Clone
Mutation Description:	A588T
Affected Codon#:	588
Affected NT#:	1762
Nucleotide Mutation:	HIF1A Mutant (A588T), Myc-DDK-tagged ORF clone of Homo sapiens hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor) (HIF1A), transcript variant 1 as transfection-ready DNA
Effect:	Renal carcinoma, association with
Symbol:	HIF-1 alpha
Synonyms:	bHLHe78; HIF-1-alpha; HIF-1A; HIF-1alpha; HIF1; HIF1-ALPHA; MOP1; PASD8
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_001530
ORF Size:	2478 bp
Restriction Sites:	SgfI-MluI
Restriction Sites:	SgfI-MluI

View online »

Cloning Scheme:



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 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).

Note:

Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq:	NP_001521
RefSeq Size:	2478 bp
RefSeq ORF:	2481 bp
Locus ID:	3091
Cytogenetics:	14q23.2
Domains:	PAS, HLH, PAC
Protein Families:	Transcription Factors
Protein Pathways:	mTOR signaling pathway, Pathways in cancer, Renal cell carcinoma
MW:	90.9 kDa
Gene Summary:	This gene encodes the alpha subunit of transcription factor hypoxia-inducible factor-1 (HIF-1), which is a heterodimer composed of an alpha and a beta subunit. HIF-1 functions as a master regulator of cellular and systemic homeostatic response to hypoxia by activating transcription of many genes, including those involved in energy metabolism, angiogenesis, apoptosis, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia. HIF-1 thus plays an essential role in embryonic vascularization, tumor angiogenesis and pathophysiology of ischemic disease. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jul 2011]