

Product datasheet for **RC239539**

HIF1 beta (ARNT) (NM_001286035) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HIF1 beta (ARNT) (NM_001286035) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ARNT
Synonyms:	bHLHe2; HIF-1-beta; HIF-1beta; HIF1-beta; HIF1B; HIF1BETA; TANGO
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide
Sequence:**

>RC239539 representing NM_001286035
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACATCAGATGTACCATCACTGGGTCCAGCCATTGCCTCTGGAACTCTGGACCTGGAATTCAGGTG
 GAGGAGCCATTGTCCAGAGGGCTATTAAGCGCGACCAGGGCTGGATTTTGATGATGATGGAGAAGGGAA
 CAGTAAATTTTTGAGGTGTGATGATGATCAGATGTCTAACGATAAGGAGCGGTTTGCCAGGTCGGATGAT
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 ACAAGATGACAGCCTACATCACAGAAGTGTGATATGGTACCCACCTGTAGTGCCTGGCTCGAAAACC
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 ACTGATGGCTCCTATAAGCCGTCTTCTCACTGATCAGGAAGTAAACATTTGATCTTGGAGGCAGCAG
 ATGGCTTCTGTTTATTGTCTCATGTGAGACAGGCAGGGTGGTGTATGTGTCTGACTCCGTGACTCCTGT
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 CTTC AACAGGTAGTGAATTAAGGCAAGTGTCTGTCTGTCATGTTCCGGTTCGGTCTAAGAACCAA
 GAATGGCTCTGGATGAGAACCAGCTCCTTACTTTCCAGAACCCTTACTCAGATGAAATTGAGTACATCA
 TCTGTACCAACACCAATGTGAAGAACTCTAGCCAAGAACCACGGCCTACACTCTCCAACACAATCCAGAG
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 CCCCCTTTTCAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239539 representing NM_001286035
 Red=Cloning site Green=Tags(s)

MTSDVPSLGPAAISGNSGPGIQGGGAIIVQRAIKRRPGLDFDDDGEGNSKFLRCDDDQMSNDKERFARSDD
 EQSSADKERLARENHSEIERRRRNKMTAYITELSDMVPTCSALARKPKDLTILRMAVSHMKSLRGTGNTS
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 SRHNIIEGIFTFVDHRCVATVGYQPQELLGKNIVEFCHPEDQQLLRDSFQQVVKLKGQVLSVMFRFRSKNQ
 EWLWMRTSSFTFQNPYSDEIEYIICNTNTNVKNSSQEPRTLNTIQRPLGPTANLPLEMGSQLAPRQQ
 QQQTELDMPGRDGLASYNHSQVVQPVTTTGPEHSPLEKSDGLFAQDRDPRFSEIYHNINADQSKGISS
 STVPATQQLFSQNTFPPTPRPAENFRNSGLAPPVTIVQPSASAGQMLAQISRHSNPTQGATPTWTPTTR
 SGFSAQQVATQATAKTRTSQFGVGSFQTPSSFSSMSLPGAPTASPGAAAYPSLTNRGSNFAPETGQTAGQ
 FQTRTAEGVGVWPQWQGGQPHRSHSSSEQHVQPPAQQPGQPEVFQEMLSMLGDQNSYNNEEFPDLTMF
 PPFSE

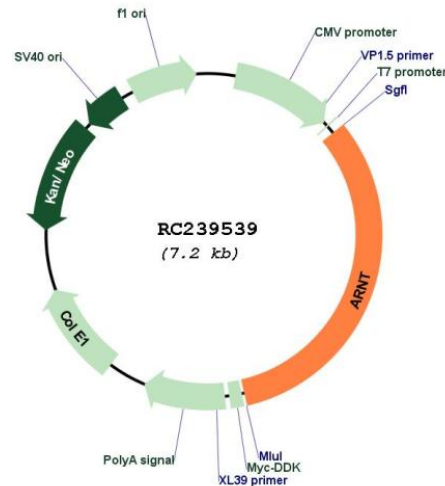
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001286035

ORF Size: 2325 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_001286035.2](#)

RefSeq Size: 4944 bp

RefSeq ORF: 2328 bp

Locus ID: 405

UniProt ID: [P27540](#)

Cytogenetics: 1q21.3

Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Pathways in cancer, Renal cell carcinoma
MW:	85.7 kDa
Gene Summary:	<p>This gene encodes a protein containing a basic helix-loop-helix domain and two characteristic PAS domains along with a PAC domain. The encoded protein binds to ligand-bound aryl hydrocarbon receptor and aids in the movement of this complex to the nucleus, where it promotes the expression of genes involved in xenobiotic metabolism. This protein is also a co-factor for transcriptional regulation by hypoxia-inducible factor 1. Chromosomal translocation of this locus with the ETV6 (ets variant 6) gene on chromosome 12 have been described in leukemias. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2013]</p>