

Product datasheet for **RC239562**

HIF1 beta (ARNT) (NM_001286036) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HIF1 beta (ARNT) (NM_001286036) 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:

>RC239562 representing NM_001286036
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGCGACTACTGCCAACCCCGAAATGACATCAGATGTACCATCACTGGGTCCAGCCATTGCCTCTG
 GAAACTCTGGACCTGGAATTC AAGGTGGAGGAGCCATTGTCCAGAGGGCTATTAAGCGGCGACCAGGGCT
 GGATTTTGATGATGATGGAGAAGGGAACAGTAAATTTTTGAGGTGTGATGATGATCAGATGTCTAACGAT
 AAGGAGCGGTTTGCCAGGTGGATGATGAGCAGAGCTCTGCGGATAAAGAGAGACTTGCCAGGGAAAATC
 ACAGTGAAATTGAACGGCGGCGACGGAACAAGATGACAGCCTACATCACAGAAGTGTGATATGGTACC
 CACCTGTAGTGCCTGGCTCGAAAACCAGACAAGCTAACCATCTTACGCATGGCAGTTTCTCACATGAAG
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 TGAACATTTGATCTTGGAGGCAGCAGATGGCTTTCTGTTTATTGTCTCATGTGAGACAGGCAGGGTGGT
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 GGCGTATCCTGGATCTAAAGACTGGAACAGTGA AAAAGGAAGGTGAGCAGTCTTCCATGAGAATGTGTAT
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 CAAGTGTGTCTGTATGTTCCGGTTCGGTCTAAGAACCAAGAATGGCTCTGGATGAGAACCAGCTCCT
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 AGCACAGCAACCTGGCCAGCCTGAGGTCTTCCAGGAGATGCTGTCCATGCTGGGAGATCAGAGCAACAGC
 TACAACAATGAAGAATTCCTGATCTAACTATGTTTCCCCCTTTTCAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239562 representing NM_001286036
 Red=Cloning site Green=Tags(s)

MAATTANPEMTSDVPSLGPAAISGNSGPGIQGGGAIQVQRAIKRRPGLDFDDDGEGNSKFLRCDDQMSND
 KERFARSDDEQSSADKERLARENHSEIERRRRNKMTAYITELSDMVPTCSALARKPKLITILRMAVSHMK
 SLRGTGNTSTDGSYKPSFLTDQELKHLILEAADGFLFIVSCETGRVVYVSDSVTPVLNQPQSEWFGSTLY
 DQVHPDDVDKLRQLSTENALTGRILDKLTGTVKKEGQQSSMRMCMGSRRSFICRMRCGSSSDVPVSVN
 RLSFVRNRCRNLGSKVDGEPHFVVVHCTGYIKAWPPAGVSLPDDPEAGQGSKFCLVAIGRLQVTSSPN
 CTDMSNVCQPTEFISRHNIEGIFTFVDHRCVATVGYQPQELLGKNIVEFCHPEDQQLLRDSFQQVVKLKG
 QVLSVMFRFRSKNQEWLWMRTSSFTFQNPYSDEIEYIICTNTNVKNSSQEPRPTLSNTIQRPLGPTANL
 PLEMGGQLAPRQQQQTTELDMPVGRDGLASYNHSQVVQPVTGPEHSPLEKSDGLFAQDRDRPSEI
 YHNINADQSKGISSSTVPATQQLFSQNTFPPTPRPAENFSGLAPPVTIVQPSASAGQMLAQISRHSNPT
 QGATPTWPTTRSGFSAQQVATQATAKTRTSQFGVGSFQTPSSFSMSLPGAPTASPGAAAYPSLTNRGS
 NFAPETGQTAGQFQTRTAEVGVWPQWQQQPHHRSSSEQHVQQPPAQQPGQPEVFEMLSMLGDQNSN
 YNNEEFPDLTMFPFSE

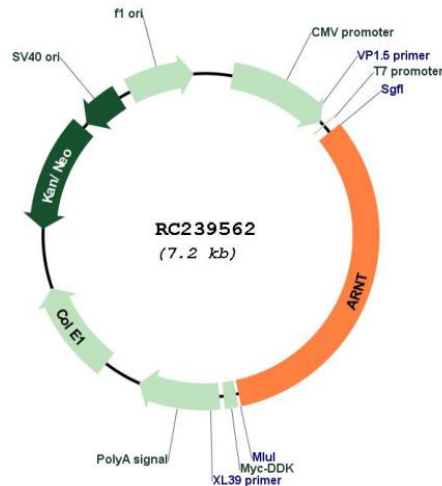
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001286036

ORF Size: 2361 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_001286036.2](#)

RefSeq Size: 4897 bp

RefSeq ORF: 2364 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: 86.8 kDa

Gene Summary: 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]