

## **Product datasheet for SC312979**

## OriGene Technologies, Inc.

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## HIF1 beta (ARNT) (NM\_178426) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: HIF1 beta (ARNT) (NM\_178426) Human Untagged Clone

Tag: Tag Free
Symbol: HIF1 beta

Synonyms: aryl hydrocarbon receptor nuclear translocator; bHLHe2; dioxin receptor, nuclear

translocator; HIF-1beta; HIF1B; HIF1BETA; hypoxia-inducible factor 1, beta subunit;

OTTHUMP00000032943; TANGO

Mammalian Cell

Selection:

None

**Vector:** pCMV6-XL4

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM\_178426 edited

ATGGCGGCGACTACTGCCAACCCCGAAATGACATCAGATGTACCATCACTGGGTCCAGCC ATTGCCTCTGGAAACTCTGGACCTGGAATTCAAGGTGGAGGAGCCATTGTCCAGAGGGCT ATTAAGCGGCGACCAGGGCTGGATTTTGATGATGATGAGGAGAAGGGAACAGTAAATTTTTG AGGTGTGATGATCAGATGTCTAACGATAAGGAGCGGTTTGCCAGGTCGGATGATGAG CAGAGCTCTGCGGATAAAGAGAGACTTGCCAGGGAAAATCACAGTGAAATTGAACGGCGG CGACGGAACAAGATGACAGCCTACATCACAGAACTGTCAGATATGGTACCCACCTGTAGT GCCCTGGCTCGAAAACCAGACAAGCTAACCATCTTACGCATGGCAGTTTCTCACATGAAG TCCTTGCGGGGAACTGGCAACACTCCACTGATGGCTCCTATAAGCCGTCTTTCCTCACT GATCAGGAACTGAAACATTTGATCTTGGAGGCAGCAGATGGCTTTCTGTTTATTGTCTCA TGTGAGACAGGCAGGGTGGTGTATGTGTCTGACTCCGTGACTCCTGTTTTGAACCAGCCA CAGTCTGAATGGTTTGGCAGCACACTCTATGATCAGGTGCACCCAGATGATGTGGATAAA CTTCGTGAGCAGCTTTCCACTTCAGAAAATGCCCTGACAGGGCGTATCCTGGATCTAAAG ACTGGAACAGTGAAAAAGGAAGGTCAGCAGTCTTCCATGAGAATGTGTATGGGCTCAAGG AGATCGTTTATTTGCCGAATGAGGTGTGGCAGTAGCTCTGTGGACCCAGTTTCTGTGAAT AGGCTGAGCTTTGTGAGGAACAGATGCAGGAATGGACTTGGCTCTGTAAAGGATGGGGAA CCTCACTTCGTGGTGGTCCACTGCACAGGCTACATCAAGGCCTGGCCCCCAGCAGGTGTT

TCCCTCCCAGATGATGACCCAGCCTGA

**Restriction Sites:** Please inquire **ACCN:** NM 178426

**Insert Size:** 2000 bp



## HIF1 beta (ARNT) (NM\_178426) Human Untagged Clone - SC312979

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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: <u>NM 178426.1, NP 848513.1</u>

RefSeq Size:3563 bpRefSeq ORF:987 bpLocus ID:405

**Cytogenetics:** 1q21.3

Protein Families: Druggable Genome, Transcription Factors
Protein Pathways: Pathways in cancer, Renal cell carcinoma

**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]

Transcript Variant: This variant (2) lacks several alternate segments, compared to variant 1, that causes a frameshift. The resulting protein (isoform 2) is shorter and has a distinct C-

terminus, compared to variant 1.