

## Product datasheet for **SC119159**

### Aryl hydrocarbon Receptor (AHR) (NM\_001621) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Aryl hydrocarbon Receptor (AHR) (NM\_001621) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** AHR  
**Synonyms:** bHLHe76; RP85  
**Vector:** pCMV6-XL4  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**Cell Selection:** None  
**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_001621 edited

```
GGGCGCCGCGAATTCTGCACCAGGGGAGGCAGTGGCTGGGGAGTCCCCTCGACGCTCTG
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ATGCAGCTGATATGCTTTATTGTGCCGAGTCCCATATCCGAATGATTAAGACTGGAGAAA  
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ACTGTTTCATCTAAGTGCCTCACATTTTTTTCTACCTATAACACTCTAGGATGTATATT  
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**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_001621 unedited  
 NNGTGTCCGAATTTGTATACGACTCCTATAGGCGGCCCGGATTTCGGCACCAGGGGAGGC  
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 GACAGGGGCAGCCGTGTAGCCGAACGGAAGCTGGGAGCAGCCGGGACTGGTGGCCCGCGC  
 CCGAGCTCCGACAGGCGGGAAGCACCCCTGGATTTAGGAAGTCCCGGGAGCAGCGCGCGGC  
 ACCTCCCTCACCAAGGGGCCGCGGCGACGGTACGCGGGCGCGGCCACCCTGAGCGAC  
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 CGGGCATTGCCGCGCCCTCCGCCGTTAGACGGCACCTGCGCCGCTTGCTCGCGGG  
 TCTCCGCCCTCGCCACCCTCACTGCGCCAGGCCAGGCAGCTCACCTGTACTGGCGG  
 GGCTGCGGAAGCCTGCGTGAGCCGAGGCGTTGAGGCGCGGCGCCACGCCACTGTCCCGA  
 GAGGACGAGGTGGAGCGGGCGCGGCTTCGCGGAACCCGCGCGGCCCGCCGAGTGGTC  
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 CGGCTGGGCACCATGAACAGCAGCAGCGCAACATCACCTACGCCAGTCGCAAGCGGCGG  
 AAGCCGGTGCAGAANACAGTAAAGCCAATCCCAGCTGAAGGAATCAAGTCAAATCCTTCC  
 AAGCGGCATAGAGACCCGACTTATACAGAGNTGGACCGTTTGGCTAGCCTGCTGCCTTTC  
 CCACAGATGTATTAATAAGTGGACANACTTCAGTTCTAAGCTCAGCGTCATTACCTGAGA  
 GCCAGAC

**3' Read Nucleotide Sequence:** >OriGene 3' read for NM\_001621 unedited  
 NAACCCTACGTGNTATTTTTATTCTTTANTACATTTTAGTTATTTTATATAGATAAAATA  
 TACAATATTGCTTTTCAAACCTTTAATTTTATAACTGTATAACTGATTGTCATCATATTC  
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 CAAAAATGGTTTATGTAAGACTTATAATAAAAGGTTTAAATGTAATAAATAGAGTATTAAT  
 CTAGACCTCTGGTCTAAATCCTTAGATACCTCATGCTGGAACAAATTATGAAATGTTTC  
 AGACAAATTTTTTCCAACACTTAAATTGATTCTACAGTTTTAAAGTTTTGACTGAAAATA  
 CACAGAACTCAGAGATATTTTGTCCGAAGCCATTTTTATATACATTAACCTACTAAAAAA  
 AGTAAAAGAAATAAAAAATGATTTTTTTTTTTTTTTGGAGACGGAGTCTCGGTCTATTGC  
 CAGGCTGGAGTGCAGTGGGGCGATCTTGGCTCTGCAACCTCCGATTCCCAGGTTTCAGGCT  
 ATTCTCCTGCCTCAGCCTCCCGAGTAGCTAGGACCACAGGCTCACGCCACCATGCCTGGT  
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 CCCTGGCCCCCCTGGGGCTCCCGCCCCCTTCCGGCGGCTTGGTTGCCCTTTCC  
 TCCTCCTCGTCTCCCTCTGCTCCCTGGCCGGGCGCTCTCTCGCTTTCCTCCCTCCTCTCC  
 CTCTCTCGGGCGGCTCTCTTCTTCTGTGCGCCGCCCTCCCTTTTTCTCTCTTCT  
 TTCCTCTCCTTCTTTGCCTTTTCTCTGGGGTGGCCGCCCGCGTCCCCCTGAACACAA  
 GAAAAA

**Restriction Sites:** NotI-NotI  
**ACCN:** NM\_001621  
**Insert Size:** 5000 bp

**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](mailto: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](#)

**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\\_001621.2](#), [NP\\_001612.1](#)

**RefSeq Size:** 5496 bp

**RefSeq ORF:** 2547 bp

**Locus ID:** 196

**UniProt ID:** [P35869](#)

**Cytogenetics:** 7p21.1

**Domains:** PAS, HLH, PAC

**Protein Families:** Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

**Gene Summary:** The protein encoded by this gene is a ligand-activated helix-loop-helix transcription factor involved in the regulation of biological responses to planar aromatic hydrocarbons. This receptor has been shown to regulate xenobiotic-metabolizing enzymes such as cytochrome P450. Before ligand binding, the encoded protein is sequestered in the cytoplasm; upon ligand binding, this protein moves to the nucleus and stimulates transcription of target genes. [provided by RefSeq, Sep 2015]