

## Product datasheet for **MG227590**

### Ahr (NM\_013464) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ahr (NM_013464) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ahr
Synonyms:	A; Ah; Ahh; Ahre; bHLHe7; bHLHe76; In
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG227590 representing NM\_013464  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGCAGCGCGCCAACATCACCTATGCCAGCCGCAAGCGGCGCAAGCCGGTGCAGAAAACAGTAAAGC  
 CCATCCCCGCTGAAGGAATTAAGTCAAATCCTTCTAAGCGACACAGAGACCGGCTGAACACAGAGTTAGA  
 CCGCCTGGCCAGCCTGCTGCCCTTCCCGCAAGATGTTATTAATAAGCTGGACAAACTCTCTGTTCTTAGG  
 CTCAGCGTCAGCTACCTGAGGGCCAAGAGCTTCTTTGATGTTGCATTAAGTCCACCCCTGCTGACAGAA  
 ATGAGGGCCAGGACCAGTGTAGAGCACAAATCAGAGACTGGCAGGATTTGCAAGAAGGAGAGTTCTTGTT  
 ACAGGCGCTGAATGGCTTTGTGCTGTTGTACAGCAGATGCCTTGGTCTTCTATGCTTCTCCACTATC  
 CAAGATTACCTGGGCTTTCAGCAGTCTGATGTCATCCATCAGAGCGTATATGAGCTCATCCATACAGAAG  
 ACCGGGCGGAATTCAGCGCCAGCTTCACTGGGCTCTAAACCCAGACTCTGCACAAGGAGTGGACGAAGC  
 CCATGGCCCTCCACAGGCAGCAGTCTATTATACCCAGACCAGCTTCTCCAGAGAACGCTTCTTTTCATG  
 GAGAGGTGCTTACAGTGCAGGCTGAGGTGCCTGCCTGGATAAATTCATCTGGTTTTCTGGCAATGAATTTCC  
 AAGGGAGGTTAAAGTATCTTTCATGGACAGAACAAGAAAGGGAAGGACGGAGCGCTGCTTCTCCACAAC  
 GGCTTTGTTTGAATAGCTACTCCACTTCAGCCACCCTCCATCCTGGAATTCGAACAAAAACTTCATC  
 TTCAGGACCAACACAAGCTAGACTTCACACCTATTGGTTGTGATGCCAAAGGGCAGCTTATTCTGGGCT  
 ATACAGAAGTAGAGCTGTGCACAAGAGGATCGGGTACCAGTTCCATCCATGCTGCAGACATACTTCACTG  
 TGCAGAATCCCACATCCGCATGATTAAGACTGGAGAAAGTGGCATGACAGTTTTCCGGCTTCTTGCAAAA  
 CACAGTCGCTGGAGGTGGTCCAGTCCAATGCACGCTTGATTTACAGAAATGGAAGACCAGATTACATCA  
 TCGCCACTCAGAGACCAGTGCAGGATGAAGAAGGACGAGAGCATTTACAGAAGCGAAGTACGTCCGTGCC  
 CTTTCATGTTTGTACCGGAGAGGCTGTGTTGTACGAGATCTCCAGCCCTTCTCTCCATAATGGATCCC  
 CTACCAATACGCACCAAAAGCAACACTAGCAGGAAAGACTGGGCTCCCCAGTCAACCCCAAGTAAGGATT  
 CTTTCCACCCAGTTCTTATGAGTGCCTCATCCAGCAGGATGAGTCCATCTATCTGTGCTCCTCCTTC  
 AAGCCCTGCGCTGTTAGACAGCCATTTTCTCATGGGCTCCGTGAGCAAGTGCAGGAGTTGGCAAGACAGC  
 TTTGCGGCCGAGGAAGTGGGCTGCGCTGAAACATGAGCAAATGGCCATGCTCAGGACGTGAACCTTG  
 CACTCTCTGGCGGCCCTCAGAGCTCTTCCGGATAATAAAAAAATGACTTGTACAGCATCATGAGGAA  
 CCTTGGGATTGATTTGAAGATATCAGAAGCATGCAGAACGAGGAGTTCTTCAGAACTGACTCCACCGCT  
 GCTGGTGAGGTTGACTTCAAAGACATCGACATAACGGACGAAATCCTGACCTACGTGCAGGATCCCTGA  
 ACAATTCAACTTTGCTGAACTCGGCTTGCCAGCAGCAGCCTGTGACTCAGCACCTAAGCTGTATGCTGCA  
 GGAGCGCCTGCAACTAGAGCAACAGCAACAGCTTCAGCAGCCCCCGCCGAGGCTCTGGAGCCCCAGCAG  
 CAGCTGTGTGATGAGTGGTGTGCCCCAGCAAGATCTGGGTCGAAGCACACGCAAAATCAACGGCACGTTTG  
 CAAGTTGGAACCCACCCCTCCCGTGTCTTTCAACTGTCCCAGCAGGAACTAAAGCACTATCAGCTCTT  
 TTCCAGCTTACAGGGGACTGCTCAGGAATTTCCCTACAAACCAGAGGTGGACAGTGTGCCTTACACACAG  
 AACTTTGCTCCCTGTAATCAGCCTCTGCTTCCAGAACATTCAGAGTGTGCAGTTGGACTTCCCTGGAA  
 GGGATTTGAACCGTCCCTGCATCCCACTACTTCTAATTTAGATTTTGTGAGTTGTTACAAGTTCTCTGA  
 AAACCAAAGTCATGGGATAAACTCACAGTCCGCCATGGTCAGTCTCAGGCATACTATGCTGGGGCCATG  
 TCCATGTATCAGTGCCAGCCAGGGCCACAGCGCACCCCTGTGGACCAGACGCAGTACAGCTCTGAAATTC  
 CAGGTTCTCAGGCATTCTAAGCAAGGTGCAGAGT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG227590 representing NM\_013464  
 Red=Cloning site Green=Tags(s)

```
MSSGANITYASRKRKPVQKTVKPIAEGIKSNPSKRHRDRLNTELDRLASLLPFPQDVINKLKDLSVLR
LSVSYLRAKSFDFVALKSTPADRNGGQDCRAQIRDWQDLQEGEFLLQALNGFVLVVTADALVFYASSTI
QDYLGQQSDVIHQSVYELIHTEDRAEFQRQLHWALNPDSAQGVDEAHGPPQAAYVYTPDQLPENASFM
ERCFRCRLRCLLDNSSGFLAMNFQGRKYLHGQNKKGKDGALLPPQLALFAIATPLQPPSILEIRTKNFI
FRTKHKLDFTPIGCDAKGQLILGYTEVELCTRGSGYQFIHAADILHCAESHIRMIKTGESGMTVFRLLAK
HSRWRWVQSNARLIYRNGRPDYIIATQRPLTDEEGREHLQKRSTSLPFMFATGEAVLYEISSPFSPIMDP
LPIRTKSNTSRKDWAPQSTPSKDSFHPSSLMSALIQQDESIYLCPPSSPALLDSHFLMGSVSKCGSWQDS
FAAAGSEAALKHEQIGHAQDNLALSGGPSELPDNKNNDLYSIMRNLGIDFEDIRSMQNEEFFRTDSTA
AGEVDFKDIDITDEILTYVQDSLNNSTLLNSACQQPVTQHLSCMLQERLQLEQQQQQLQPPPPQALEPQQ
QLCQMVCPPQDLGPKHTQINGTFASWNPVTPVSNCPQQELKHYQLFSSLQGTAEFFPYKPEVDSVPYTQ
NFAPCNQPLLPEHSKSVQLDFPGRDFEPSLHPTTSLNDFVSLQVPENQSHGINSQSAMVSPQAYYAGAM
SMYQCQPGPQRTVPDQTQYSSEIPGSQAFLSKVQS
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_013464

ORF Size: 2415 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\\_013464.4](#), [NP\\_038492.1](#)

**RefSeq Size:** 5494 bp

**RefSeq ORF:** 2418 bp

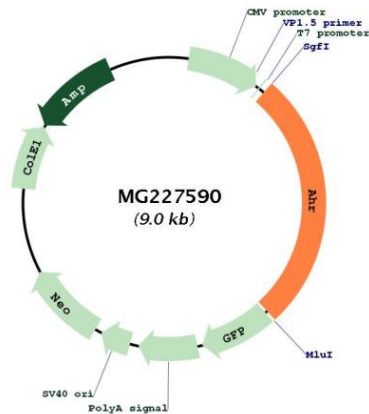
**Locus ID:** 11622

**UniProt ID:** [P30561](#)

**Cytogenetics:** 12 15.78 cM

**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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015]

**Product images:**



Circular map for MG227590