

## Product datasheet for **SC324594**

### AARE (APEH) (NM\_001640) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AARE (APEH) (NM_001640) Human Untagged Clone
Tag:	Tag Free
Symbol:	AARE
Synonyms:	AARE; ACPH; APH; D3F15S2; D3S48E; DNF15S2; OPH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_001640.3  
 CTCAACCCCTTCTCTCGTAGGCCCTTCTACCCTCCCCGAAGCCGGGCTCCCGGGTCCGC  
 TTCCACAGGGCCGCCCTCTCTCCGAGATCCAACGCCCTCGCCCTCGGTAAAGAGGCC  
 AGGACTCAGCCCACGGCCCCGCCCCCACTTGGCTAGTCCGCCCTGGCGAGACCCTGC  
 TCTACCCACCCAGGACTTCTCGCTCCCAGGCCGGTCTCTACCGTCAAGGCCCGCC  
 CCTGCCAACGGTCTCACCCATTAGCCGAAGCCCCGCCCTCACAGATTGCCCGAGGC  
 AGGGCCGAGACAGCCCCGGGCGTCCCAGGCTCCGCCCCGGAAGCCTCACTTCCGGCG  
 CGAGCACGCCCCCTCGCCCCGGCGGACAGAGAGGAGACTATGGAACGTCAAGTGTGT  
 GAGCGAGCCCAGGAGGCGGCGTCTGTATCGGGCCTTAGCCGCCAGCCCGCTGAG  
 CGCCGCTGCCTGGGCCGAGGTCAACACGCAGTACGGCGGCAATACCGGACGGTGCA  
 CACTGAGTGGACCAGAGGGACCTGGAACGCATGGAGAACATTGATTCTGCCGCAATA  
 CCTGGTGTTCATGACGGGGACTCAGTGGTGTTCGAGGACCTGCAGGCAACAGTGTGA  
 GACCCGGGGGAACTGCTGAGCAGAGAGTCTCTTCAGGCACCATGAAAGCTGTGTGCG  
 CAAGGCTGGAGGCACGGCCCTGGGAAGAGAAGCAGTTCCTGGAGTCTGGGAGAAGAA  
 CCGGAAGCTCAAGAGCTCAACCTGTGAGCGTGGAGAAACATGGGCCTGTTTATGAGGA  
 TGAAGTGTGGTGCCTGTCTGGTGCAGTCCGAGACACACTTGTGTATGTGGCAGA  
 GAAGAAGCGCCCAAGGCCGAGTCTTCTTTCAGACAAAGCCTTGGACGTCAAGTCCAG  
 CGATGATGAGATAGCCAGGCTGAAGAAGCCAGACCAAGCCATCAAGGGGGATCAGTTTGT  
 GTTTTATGAAGACTGGGGAGAAAACATGGTTTCCAAAAGCATCCCTGTGCTCTGCGTGT  
 GGATGTCGAGAGTGGCAACATCTCTGTGCTTGAAGGGTCCCTGAGAATGTGTCCCTGG  
 ACAGGCATTTTGGGCCCTGGAGATGCTGGTGTGGTGTTCGAGGCTGGTGGCATGAGCC  
 CTTCCGGTTGGGCATCCGCTTTTGCACCAATCGCAGGTGAGCCCTGTATTACGTGGACCT  
 CATTCCGGTGGGAAAGTGTGAGCTCCTCGGATGACTCCCTGGTGTCTCTTCTCCCGCT  
 GAGCCCAGACCAATGTGCGATTGTCTACCTGCAGTACCCATCTCTGATCCCCATACCA  
 ATGCAGCCAGCTGTGCTGTATGACTGGTATACCAAGTTACCTCAGTGGTGGTATGATGT  
 TGTGCTCGGCAGCTGGGAGAGAACTTCTCTGGGATCTACTGCAGCCTTCTGCCTTTGGG  
 ATGCTGGTCACTGACAGCCAGAGAGTGGTCTTTGACTCGGCTCAGCGCAGCCGGCAGGA  
 CCTGTTTGTGTGGACACCCAAGTGGGCACTGTGACCTCCCTCACAGCTGGAGGGTCAAG  
 TGGGAGCTGGAAGTTGCTCACAATTGACCAGGACCTCATGGTGGCACAGTTTTCCACACC  
 CAGCCTACCTCCAACCTGAAAGTTGGTTCCTGCCTTCTGCAGGGAAGGAGCAGTCAAGT  
 GTTGTGGTGTCCCTGGAGGAGCCGAGCCATTCCCGACATCCACTGGGCATCCGGGT  
 GCTACAGCCACCCAGAGCAAGAGAATGTGAGTATGCTGGCCTTGAAGCAAT  
 CCTGCTGCAGCCTGGCAGCCCTCCAGATAAGACCAAGTGCCTTGGTGGTCAAGCCCA  
 CGGGGGGCCCCATTATCCTTTGTCACTGCCTGGATGCTGTTCCAGCCATGCTTTGCAA  
 GATGGGCTTTGCGGTAATACTAGTGAACATATCGTGGTCCACGGGCTTTGGCCAGGACAG  
 CATCCTCTCCCTCCAGGCAATGTGGGCCACAGGATGTGAAGGATGTCCAGTTTGCAGT  
 GGAACAGTGTCCAGGAGGAACACTTTGATGCAAGCCATGTGGCCCTTATGGTGGTTC  
 CCATGGTGGCTTCATTTCTGCCACTTGATTGGTCAAGTACCCAGAGACCTACAGGGCCTG  
 CGTGGCCCGAACCCCGTATCAACATCGCCTCCATGTTGGGCTCCACTGACATCCCTGA  
 CTGGTGGTGGTGGAGGCTGGCTTTCTTTTCAGCAGTACTGCCTGCCAGACCTCAGCGT  
 GTGGGCTGAGATGCTGGACAAATCGCCATCAGATACATCCCTCAGGTGAAGACACCACT  
 GTTACTGATGTTGGGCCAGGAGGACCGCGTGTGCCCTTCAAGCAGGGCATGGAGTATTA  
 CCGTGCCTCAAGACCCGGAATGTGCCTGTTCCGGCTCCTGCTCTATCCAAAAGCACCA  
 CGCATTATCAGAGGTGGAGGTGGAGTCAAGACGCTTATGAAAGTGTGTCTGCTGCTGACG  
 CACACACTTGGGAGCTGAAGCCCTGCCATTCTGCATGAGCTGATCAGCCTGTGCCACAC  
 TTCGCTCTTGGAGGCTCAACGGTCTGGCAGGGCAGCAGGAGGCTTTCTGGGCTCTGGAC  
 TCCACGGATGCGTGGGACAGGGAATGTGGGCTATGTAGTCATAATAAATTAGGACACAAA  
 AAAAAAAAAAAAAA

**Restriction Sites:** Please inquire  
**ACCN:** NM\_001640

**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](#)

**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:** [NM\\_001640.3](#), [NP\\_001631.3](#)

**RefSeq Size:** 2775 bp

**RefSeq ORF:** 2199 bp

**Locus ID:** 327

**UniProt ID:** [P13798](#)

**Cytogenetics:** 3p21.31

**Domains:** Peptidase\_S9

**Protein Families:** Druggable Genome, Protease

**Gene Summary:**

This gene encodes the enzyme acylpeptide hydrolase, which catalyzes the hydrolysis of the terminal acetylated amino acid preferentially from small acetylated peptides. The acetyl amino acid formed by this hydrolase is further processed to acetate and a free amino acid by an aminoacylase. This gene is located within the same region of chromosome 3 (3p21) as the aminoacylase gene, and deletions at this locus are also associated with a decrease in aminoacylase activity. The acylpeptide hydrolase is a homotetrameric protein of 300 kDa with each subunit consisting of 732 amino acid residues. It can play an important role in destroying oxidatively damaged proteins in living cells. Deletions of this gene locus are found in various types of carcinomas, including small cell lung carcinoma and renal cell carcinoma. [provided by RefSeq, Jul 2008]