

## Product datasheet for **RG200666**

### **AARE (APEH) (NM\_001640) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	AARE (APEH) (NM_001640) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	APEH
Synonyms:	AARE; ACPH; APH; D3F15S2; D3S48E; DNF15S2; OPH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG200666 representing NM\_001640  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGAACGTCAGGTGCTGCTGAGCGAGCCCGAGGAGCGCGGCTCTGTATCGGGCCCTAGCCGCCAGC  
CCGCGCTGAGCGCCGCTGCCTGGGCCCGGAGGTCACCACGCAGTACGGCGGCCAATACCGGACGGTGCA  
CACTGAGTGGACCCAGAGGGACCTGGAACGCATGGAGAACATTGATTCTGCCGCCAATACCTGGTGTTT  
CATGACGGGGACTCAGTGGTGTGTCAGGACCTGCAGGCAACAGTGTGGAGACCCGGGGGAACTGCTGA  
GCAGAGAGTCTCCTTCAGGCACCATGAAAGCTGTGCTGCGCAAGGCTGGAGGCACGGGCCCTGGGAAGA  
GAAGCAGTTCCTGGAGGTCTGGGAGAAGAACCGGAAGCTCAAGAGCTTCAACCTGTCAGCGCTGGAGAAA  
CATGGGCTGTTTATGAGGATGACTGCTTTGGCTGCCTGTCTGGTGCCTCGGAGACACACTTGTGT  
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CGATGATGAGATAGCCAGGCTGAAGAAGCCAGACCAAGCCATCAAGGGGGATCAGTTTGTGTTTTATGAA  
GACTGGGAGAAAAACATGGTTTCCAAAAGCATCCCTGTGCTCTGCGTGGATGTGAGAGTGGCAACA  
TCTCTGTGCTTGAGGGGTCCCTGAGAATGTGTCCCTGGACAGGCATTTGGGCCCTGGAGATGCTGG  
TGTGGTGTGTTGGGCTGGTGGCATGAGCCCTCCGGTTGGGCATCCGCTTTGCACCAATCGCAGGTCA  
GCCCTGTATTACGTGGACCTCATCGGGGGAAAGTGTGAGCTCCTCTCGGATGACTCCCTGGCTGTCTCT  
CTCCCCGGCTGAGCCAGACCAATGTGCGATTGTCTACCTGCAGTACCCATCTCTGATCCCCATACCA  
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CAGCTGGGAGAGAACTTCTGCGGATCTACTGCAGCCTTCTGCCTTTGGGATGCTGGTCACTGACAGCC  
AGAGAGTGGTCTTTGACTCGGCTCAGCGCAGCCGGCAGGACCTGTTTGTGAGACACCCAAAGTGGGCAC  
TGTGACCTCCCTCACAGCTGGAGGGTCAAGTGGGAGCTGGAAGTTGCTCACAATTGACCAGGACCTCATG  
GTGGCACAGTTTTCCACACCCAGCCTACCTCCAACCCTGAAAGTTGGGTTCTGCCTTCTGACGGGAAGG  
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TTGCTACTGCCTGGATGCTGTTCCAGCCATGCTTTGCAAGATGGGCTTTGCGGTACTACTAGTGAAC  
TCGTGGCTCCACGGGCTTTGGCCAGGACAGCATCCTCCTCCCTCCAGGCAATGTGGGCCACCAGGATGTG  
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TGGGTGGTTCCCATGGTGGCTTCAATTCCTGCCACTTGATTGGTCAAGTACCAGAGACCTACAGGGCCTG  
CGTGGCCCGGAACCCCGTATCAACATCGCCTCCATGTTGGGCTCCACTGACATCCCTGACTGGTGCCTG  
GTGGAGGCTGGCTTTCCTTTCAGCAGTACTGCTGCCAGACCTCAGCGTGTGGGCTGAGATGCTGGACA  
AATCGCCCATCAGATACATCCCTCAGGTGAAGACACCACTGTTACTGATGTTGGGCCAGGAGGACCCGGC  
TGTGCCCTTCAAGCAGGGCATGGAGTATTACCGTGCCTCAAGACCCGGAATGTGCTGTTCCGGCTCCTG  
CTCTATCCAAAAGCACCCACGCATTATCAGAGGTGGAGTGGAGTCAGACAGCTTCATGAATGCTGTGC  
TCTGGCTACGCACACACTTGGGCAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG200666 representing NM\_001640  
 Red=Cloning site Green=Tags(s)

```
MERQVLLSEPEEAAAALYRGLSRQPALSAACLGPEVTTQYGGQYRTVHTEWTQRDLERMENIRFCRQYLVF
HDGDSVVFAGPAGNSVETRGELL SRESPTGTMKAVLRKAGGTGPGEKQFLEVWEKNRKLKSFNLSALEK
HGPVYEDDCFGCLSWSHSETHLLYVAEKKRPKAESFFQTKALDVSASDDEIARLKKPDQAIKGDQVFVYE
DWGENMYSKSIPLVLCVLDVESGNI SVLEGV PENVSPGQAFWAPGDAGVVFVGGWHEPFRLGIRFCTNRRS
ALYYVDLIGGKCELLSDDSLAVSSPRLSPDQCRI VYLQYPSLI PHHQCSQLCLYDWYTKVTSVVVDV VPR
QLGENFSGIYCSLLPLGCWSADSQRVVFDSAQRSRQDLFAVDTQVGTVTSLTAGGSGGSWKLITIDQDLM
VAQFSTPSLPPTLKVGFLPSAGKEQSVLWVSL EEA EPIPD IHWGIRVLQPPPEQENVQYAGLDFEAILLQ
PGSPDPKTQVPMVMPHGGPHSSFVTAWMLFPAMLCKMGFAVLLVNYRGSTGFGQDSILSLPGNVGHQDV
KDVQFAVEQVLQEEHFDASHVALMGGSHGGFISCHLIGQYPETYRACVARNPVINIASMLGSTDIPDWCV
VEAGFPFSSDCLPDL SVWAEMLDKSPIRYPQVKTPLLLMLGQEDRRVPFKQGM EYRALKTRNVPVRL
LYPKSTHALSEVEVESDSFMNAVLWLRTHLGS
```

TRTRPLE - GFP Tag - V

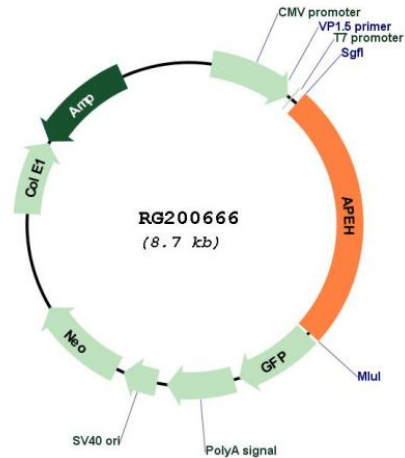
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



## Plasmid Map:



ACCN: NM\_001640

ORF Size: 2196 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](#)

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001640.3</a> , <a href="#">NP_001631.3</a>
<b>RefSeq Size:</b>	2775 bp
<b>RefSeq ORF:</b>	2199 bp
<b>Locus ID:</b>	327
<b>UniProt ID:</b>	<a href="#">P13798</a>
<b>Cytogenetics:</b>	3p21.31
<b>Domains:</b>	Peptidase_S9
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Gene Summary:</b>	<p>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]</p>