

## Product datasheet for **RR205989**

### Auh (NM\_001108407) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Auh (NM\_001108407) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Auh  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR205989 representing NM\_001108407  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGC**C

ATGAGCATTGTGGTGCTTGAATTAACAGAGCTTATGGGAAAAATTCCTCAGTAAAAATCTTCTCAAAA  
TGTTATCAAAAAGCGGTGGACGCATTAATAATCGGATAAGAAAGTTCGGACCATTATCATCAGAAGCGAAGT  
CCCTGGGATATTCTGTGCTGGCGCTGACCTTAAGGAAAGAGCCAAGATGCATTCCAGTGAAGTCGGTCCC  
TTTGTCTCCAAGATCCGAGCAGTGATCAATGACATCGCTAACCTTCTGTGCCACCATCGCTGCCATAG  
ATGGCCTGGCCCTAGGAGGGGGCCTGGAGCTGGCTTTAGCGTGTGACATTCGAGTAGCAGCTTCTTCTGC  
AAAAATGGGCCTGGTGGAAACGAAGTTGGCGATTATCCCTGGTGGAGGAGGGACACAGAGATTACCACGT  
GCCATCGGGATGGCCCTGGCAAAGGAGCTCATCTTCTCTGCACGCTTCTTACGGTTCAGGAGGCCAAAG  
CCGTGGGCTTGATCAGCCACGTGTTAGAACAGAACAGGAAGGGGATGCTGCCTACAGGAAGGCGCTGGA  
CCTGGCAAGAGAGTTTCTACCTCAGGGGCTGTGCCATGAGAGTGCCAAACTAGCAATTAACCAAGGC  
ATGGAGTTGACTTAGTGACAGGGTTAGCCATAGAAGAAGCCTGCTATGCTCAGACCATCTCAACGAAGG  
ACAGACTGGAAGTCTTCTTGTCTTCAAGGAGAAAAGACCCCTCGCTACAAGGGAGAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR205989 representing NM\_001108407  
Red=Cloning site Green=Tags(s)

MSIVVLGINRAYGKNSLSKNLLKMLSKAVDALKSDKKVRTIIIRSEVPGIFCAGADLKERAKMHSSEVGP  
FVSKIRAVINDIANLPVPTIAAIDGLALGGLELALACDIRVAASSAKMGLVETKLAIIIPGGGTQRLPR  
AIGMALAKELIFSARVLDGQEAQAVGLISHVLEQNQEGDAAAYRKALDLAREFLPQGPVAMRVAKLAINQG  
MEVDLVTGLAIEEACYAQTISTKDRLEGLLAFKEKRPPRYKGE

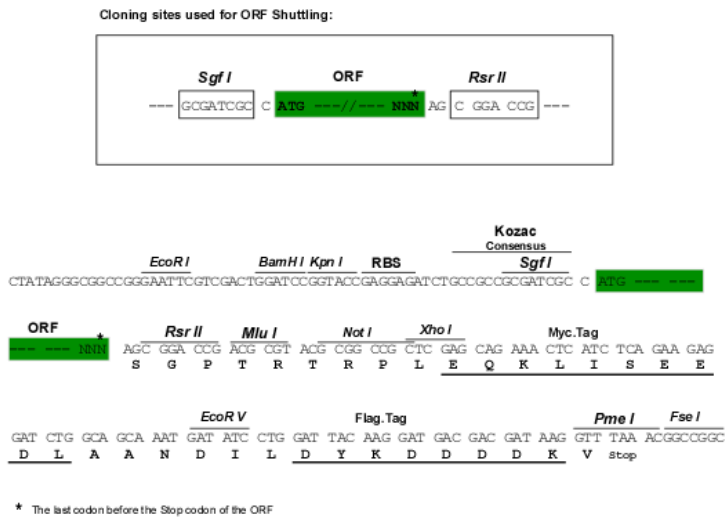
**SGP**TRTRPLEQKLISEEDLAANDILDYKDDDDKV



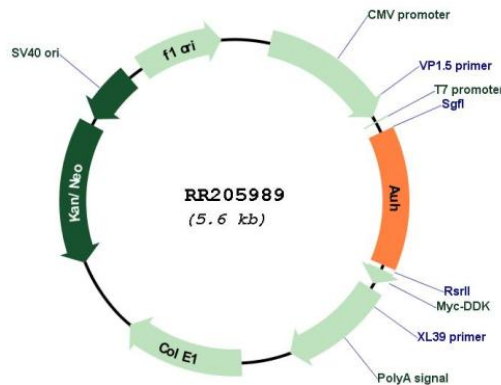
[View online »](#)

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001108407

ORF Size: 759 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.

<b>Components:</b>	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>	<u>NM_001108407.1, NP_001101877.1</u>
<b>RefSeq Size:</b>	1246 bp
<b>RefSeq ORF:</b>	762 bp
<b>Locus ID:</b>	361215
<b>Cytogenetics:</b>	17p14
<b>MW:</b>	26.9 kDa
<b>Gene Summary:</b>	Catalyzes the conversion of 3-methylglutaconyl-CoA to 3-hydroxy-3-methylglutaryl-CoA (By similarity). Also has itaconyl-CoA hydratase activity by converting itaconyl-CoA into citramalyl-CoA in the C5-dicarboxylate catabolism pathway (PubMed:13783048). The C5-dicarboxylate catabolism pathway is required to detoxify itaconate, a vitamin B12-poisoning metabolite (PubMed:13783048). Has very low enoyl-CoA hydratase activity (By similarity). Was originally identified as RNA-binding protein that binds in vitro to clustered 5'-AUUUA-3' motifs (By similarity).[UniProtKB/Swiss-Prot Function]