

## Product datasheet for **RG227708**

### CHAC1 (NM\_001142776) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CHAC1 (NM\_001142776) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** CHAC1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG227708 representing NM\_001142776  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGGGGCGCTCAGCTGGAGCTACCGAGCGGTGCCAGGCCAGGTGTGTGCGTCCGTCGGTCTTTCCGTG  
 CCCACGCCGAGACCAGCCCCGGAGGCCGCTGGGCTATCCCTGTGCCAGGCACCATGAAGCAGGAGTC  
 TGCAGCCCCGAACACCCCGCCACCTCGCAGTCCCCTACGCCGTCGCTCAGTCCCCCGAAACGACGGC  
 GACCCTCAAGCGCTGTGGATTTTCGGGTACGGCTCCCTGGTGTGGAGGCCGACTTCGCCTACAGCGACA  
 GCCGTGTGGCTTCGTGCGCGGCTACAGCCCGTTCCTGCGAGGAGACACCTCCATCGGGGACGCGA  
 CAAGATGCCTGGCCGTGTGGTGACGCTCCTTGAAGATCATGAGGGCTGCACTTGGGGCGTGGCATAACAA  
 GTGCAAGGGGAGCAGAACCCTGTTACCTGGGCCCTGCGCCTGAAGAGGCCATTGCCACGAGATCCTGG  
 CCTGCCGGGGTCTCCGGCCACAACCTTGAATACTTGCTGCGTCTGGCAGACTTCATGCAGCTCTGTGG  
 GCCTCAGGCGCAGGACGAGCACCTGGCAGCCATCGTGGACGCTGTGGCACCATGTTGCCCTGCTTCTGC  
 CCCACCGAGCAGGCTCTGGCGTGGT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG227708 representing NM\_001142776  
 Red=Cloning site Green=Tags(s)

MGGAQLELPSGARPGVCVRRSFRAHAGDQPRRPPGPIVPVPGTMKQESAAPNTPPTSQSPTPSAQFPRNDG  
 DPQALWIFGYGSLVWRPDFAYSDSRVGFVRGYSRRFWQGDTFHRGSDKMPGRVVTLLLEDHEGCTWGVAYQ  
 VQGEQNPGLGPAPEEAIATQILACRGFSGHNLEYLLRLADFMQLCGPQAQDEHLAAIVDAVGTMLPCFC  
 PTEQALALV

**TRTRPLE** - GFP Tag - V

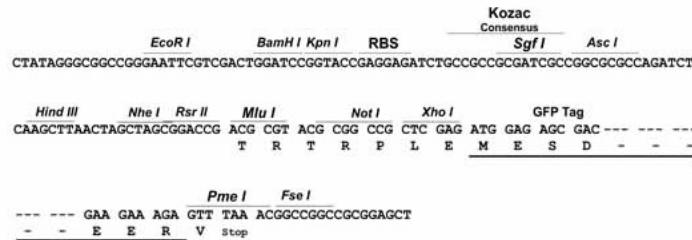
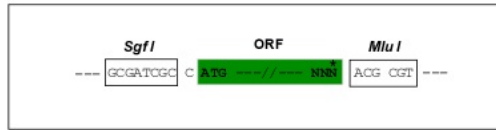


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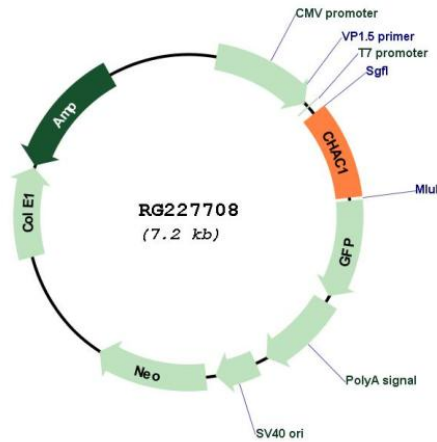
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_001142776

ORF Size: 657 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_001142776.2</u>
<b>RefSeq Size:</b>	1443 bp
<b>RefSeq ORF:</b>	534 bp
<b>Locus ID:</b>	79094
<b>Cytogenetics:</b>	15q15.1
<b>Gene Summary:</b>	This gene encodes a member of the gamma-glutamylcyclotransferase family of proteins. The encoded protein has been shown to promote neuronal differentiation by deglycosylation of the Notch receptor, which prevents receptor maturation and inhibits Notch signaling. This protein may also play a role in the unfolded protein response, and in regulation of glutathione levels and oxidative balance in the cell. Elevated expression of this gene may indicate increased risk of cancer recurrence among breast and ovarian cancer patients. [provided by RefSeq, Sep 2016]