

## Product datasheet for **RC227708**

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

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CHAC1 (NM\_001142776) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** CHAC1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC227708 representing NM\_001142776  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGGGGCGCTCAGCTGGAGCTACCGAGCGGTGCCAGGCCAGGTGTGTGCGTCCGTCGGTCTTTCCGTG  
 CCCACGCCGAGACCAGCCCCGGAGGCCCGCTGGGCCTATCCCTGTGCCAGGCACCATGAAGCAGGAGTC  
 TGCAGCCCCGAACACCCCGCCACCTCGCAGTCCCCTACGCCGTCGCTCAGTCCCCCGAAACGACGGC  
 GACCCCTCAAGCGCTGTGGATTTTCGGGTACGGCTCCCTGGTGTGGAGGCCGACTTCCATCGGGGACGCGA  
 GCCGTGTGGGCTTCGTGCGCGGCTACAGCCGCCGTTTCTGCGAGGGAGACACCTTCCATCGGGGACGCGA  
 CAAGATGCCTGGCCGTGTGGTGACGCTCCTTGAAGATCATGAGGGCTGCACTTGGGGCGTGGCATACCAA  
 GTGCAAGGGGAGCAGAACCCTGTTACCTGGGCCCTGCGCCTGAAGAGGCCATTGCCACGCAGATCCTGG  
 CCTGCCGGGGCTTCTCCGGCCACAACCTTGAATACTTGCTGCGTCTGGCAGACTTCATGCAGCTCTGTGG  
 GCCTCAGGCGCAGGACGAGCACCTGGCAGCCATCGTGGACGCTGTGGCACCATGTTGCCCTGCTTCTGC  
 CCCACCGAGCAGGCTCTGGCGCTGGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC227708 representing NM\_001142776  
 Red=Cloning site Green=Tags(s)

MGGAQLELPSGARPGVCVRRSFRAHAGDQPRRPPGPIVPGTMKQESAAPNTPPTSQSPTPSAQFPRNDG  
 DPQALWIFGYGSLVWRPDFAYSDSRVGFVRGYSRRFWQGDTFHRGSDKMPGRVVTLLLEDHEGCTWGVAYQ  
 VQGEQNPGYLGPAPEEAIATQILACRGFSGHNLEYLLRLADFMQLCGPQAQDEHLAAIIVDAVGTMLPCFC  
 PTEQALALV

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



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**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1443\\_g11.zip](https://cdn.origene.com/chromatograms/ja1443_g11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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.

**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\\_001142776.2](#)

**RefSeq ORF:** 534 bp

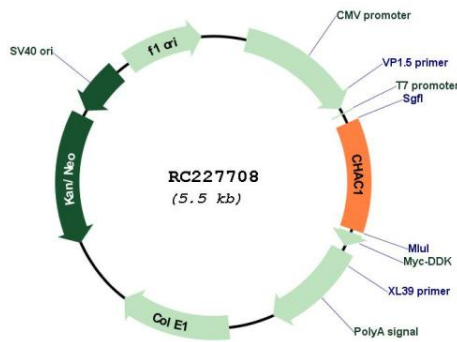
**Locus ID:** 79094

**Cytogenetics:** 15q15.1

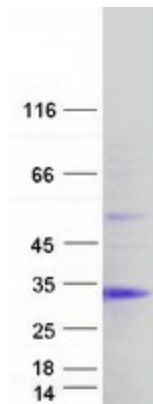
**MW:** 23.6 kDa

**Gene Summary:** 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]

**Product images:**



Circular map for RC227708



Coomassie blue staining of purified CHAC1 protein (Cat# [TP327708]). The protein was produced from HEK293T cells transfected with CHAC1 cDNA clone (Cat# RC227708) using MegaTran 2.0 (Cat# [TT210002]).