

## Product datasheet for **RN216083**

### Chac1 (NM\_001173437) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Chac1 (NM\_001173437) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Chac1  
**Synonyms:** RGD1307153  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN216083 representing NM\_001173437  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAAGCAGGAGTCCGCAGCCCAGAGCACCCCGCCTCCTTCACTGTCCCCTGCACCATCCGCGCAGCCTT  
CCTGGGAGGATGGCGACCCCAAGCCCTGTGGATTTTCGGGTACGGCTCCCTAGTGTGGAAGCCTGACTT  
TGCTACAGCGACAGCCGTGTGGCTTCGTACGTGGCTATAGCCGACGGTCTGGCAGGGAGACACCTTC  
CACAGGGGCAGCGATAAGATGCCTGGCCGAGTGGTGACCCCTCTTGAAGATCATGAGGGCTGCACCTTGGG  
GTGTGGCATAACAGGTTTCGAGGGGAGCAGGTGAGCGAGGCACTGAAGTACCTGAACGTGAGAGAAGCTGT  
GCTTGGTGGCTACGACACTAAGGAAGTCACCTTTTATCCTCAAGACACCCTGACCAACCCTCACAGCA  
CTGGCCTATGTGGCCACCCACAGAACCCTGGCTACCTGGGCCCTGTCCCGAAGAGGTCATTGCCACAC  
AGATCCTTGCTTGCCGAGGCTTCTCTGGCCACAACCTGAATACTTGTTCGTTTGGCAGACTTCATGCA  
GCTCTGTGGGCCCTCAGGCACAAGATGAGCACCTGGAAGCCATCGTGGATGCCGTAGGAAGCTTGTGCC  
TGCTCTTACCTCTCTGAGCAGCCTCTGGCACTGAT**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001173437  
**Insert Size:** 669 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<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><a href="#">NM_001173437.1</a></u> , <u><a href="#">NP_001166908.1</a></u>
<b>RefSeq Size:</b>	1569 bp
<b>RefSeq ORF:</b>	669 bp
<b>Locus ID:</b>	362196
<b>UniProt ID:</b>	<u><a href="#">B3STU3</a></u>
<b>Cytogenetics:</b>	3q35
<b>Gene Summary:</b>	Catalyzes the cleavage of glutathione into 5-oxo-L-proline and a Cys-Gly dipeptide. Acts specifically on glutathione, but not on other gamma-glutamyl peptides. Glutathione depletion is an important factor for apoptosis initiation and execution. Acts as a pro-apoptotic component of the unfolded protein response pathway by mediating the pro-apoptotic effects of the ATF4-ATF3-DDIT3/CHOP cascade. Negative regulator of Notch signaling pathway involved in embryonic neurogenesis: acts by inhibiting Notch cleavage by furin, maintaining Notch in an immature inactive form, thereby promoting neurogenesis in embryos. [UniProtKB/Swiss-Prot Function]