

Product datasheet for **SC111411**

CHAC1 (NM_024111) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHAC1 (NM_024111) Human Untagged Clone
Tag:	Tag Free
Symbol:	CHAC1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_024111, the custom clone sequence may differ by one or more nucleotides

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ATGGGGGGCGCTCAGCTGGAGCTACCGAGCGGTGCCAGGCCAGGTGTGTGCGTCCGTCGGTCTTTCCGTG
CCCACGCCGGAGACCAGCCCCGGAGGCCGCTGGGCCTATCCCTGTGCCAGGCACCATGAAGCAGGAGTC
TGCAGCCCCGAACACCCCGCCACCTCGCAGTCCCCTACGCCGTCCGCTCAGTTCCCCCGAAACGACGGC
GACCCTCAAGCGCTGTGGATTTTCGGGTACGGCTCCCTGGTGTGGAGGCCGACTTCGCCTACAGCGACA
GCCGTGTGGGCTTCGTGCGCGGCTACAGCCGCCGTTTCTGGCAGGGAGACACCTCCATCGGGGCAGCGA
CAAGATGCCTGGCCGTGTGGTGACGCTCCTTGAAGATCATGAGGGCTGCACTTGGGGCGTGGCATAACAA
GTGCAAGGGGAGCAGGTAAGCAAGGCCCTGAAGTACCTGAATGTGCGAGAGGCAGTCTTGGTGGCTACG
ATACCAAGGAGGTCACCTTCTATCCCCAAGATGCTCCTGACCAACCACTGAAGGCATTGGCCTATGTGGC
CACCCACAGAACCCTGGTTACCTGGGCCCTGCGCCTGAAGAGGCCATTGCCACGCAGATCCTGGCCTGC
CGGGGCTTCTCCGGCCACAACCTTGAATACTTGCTGCGTCTGGCAGACTTCATGCAGCTCTGTGGGCCTC
AGGCGCAGGACGAGCACCTGGCAGCCATCGTGGACGCTGTGGGCACCATGTTGCCCTGCTTCCCCCAC
CGAGCAGGCTCTGGCGCTGGTGTGA
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5' Read Nucleotide Sequence: >OriGene 5' read for NM_024111 unedited
 CAAGTCAGAAATTGTATACGACTCATATAGGCGGCCTGCGAATCGGCACGAGGGCCAGGC
 CAGGTGTGTGCGTCCGTCCGTCTTTCCGTGCCACGCCGAGACCAGCCCCGAGGCCGC
 CTGGCCCTATCCCTGTGCCAGGCACCATGAAGCAGGAGTCTGCAGCCCCGAACCCCCG
 CCACCTCGCAGTCCCCTACGCCGTCCGCTCAGTCCCCCGAAACGACGGCGACCTCAAG
 CGCTGTGGATTTTCGGGTACGGCTCCCTGGTGTGGAGGCCGACTTCGCCTACAGCGACA
 GCGGTGTGGCTTCGTGCGCGGCTACAGCCGCCGTTTCTGGCAGGGAGACACCTTCCATC
 GGGGCAGCGACAAGATGCCTGGCCGTGTGGTACGCTCCTTGAAGATCATGAGGGCTGCA
 CTTGGGGCGTGGCATAACCAAGTGAAGGGGAGCAGGTAAGCAAGGCCCTGAAGTACCTGA
 ATGTGCGAGAGGCAGTGTGGTGGCTACGATACCAAGGAGGTCACCTTCTATCCCCAAG
 ATGCTCTGACCAACCACTGAAGGCATTGGCTATGTGGCCACCCACAGAACCCTGGTT
 ACCTGGGCCCTGCGCCTGAAGAGGCCATTGCCACGCAGATCCTGGCCTGCCGGGGCTTCT
 CCGGCCACAACCTGAATACTTGTGCTGCGTCTGGCAGACTTCATGCAGCTCTGTGGCCCT
 AGGCGCAGGACGAGCACCTGGCAGCCATCGTGGACGCTGTGGCACCATGTTGCCCTGCT
 TCTGCCCCACCGAGCAGGCTCTGGCGCTGATGTGAGGGGCTGAGCCCCTGCGGNGAGTGC
 TCATGTGACATCAGGGCCAGACACTCACTCCAGTGCACAAGACAGACTTGCACCGCTT
 GAGCCACTG

3' Read Nucleotide Sequence: >OriGene 3' read for NM_024111 unedited
 GGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTAAAGAATAGTTTTATGGTAAC
 AGTATGGGACAGACTGGGAAGTTGCCAGGGCCTGTAGTGATGAGCTTCCCAGGAATAGA
 CCAACACACAGGCAGGAGTGGCCAGACAGACAAGTAGATAGACAGACAGACAGAGGGAC
 AAGAAAAACAACCAAGTGGTAAGAGGCCAGGCCAGGCTCAGCAGCTGTGTCCAGGCATC
 AGCTCCAGCTCTGCTCTGGGAACTGGTGGAGGAGAAGGGCTGGCCGGGGCCTCAGTCTT
 TACAGGGCTCCTTCTCCTCATGCCCTACTATCCCTCATCCAGCCTGCTGGGATCCTTGGC
 AGGTGGAATTCACAGGGCTATGGATGGCTGGGCTGAGTGAGCAGAGGATCGAGGCTCTTG
 GAGACTCCCTGGGGAGGTGGAGGCTGGGTGGTGTGGGGTTAGCAGCAGCACTGGGGGA
 ATCTGGTCAAGTTCAGGATGGGGCCACTGCTCAGCAGGGCCCCTGTGTCCAGGGCAGGC
 CCTCCACCTGCCACCACACCAACATGGTGCAATAAATAAAGTTTCAAGTAGTAAGTCAG
 TGTCAAGCAGGAGAGCTGCAGGCTGGCAGACAGGCAGGGACTGAGAAAGAGAAGCCTCCA
 GCCACCACCATATCTGCTCAGTGGGCTCAAGCGGTCGCAAGTCTGTCTTGTGCACTGGA
 GTGGGTGTCTGGCCCTGATGTCCACATGAGCACTTCCCGCAGGGGGCTCAGCCCTTACAC
 CAGCGCCAGAGCCTGGCTCGGTGGGGCAGAAGCAGGGCAACATGGNTGCCACAGGCTNCA
 CGATGGCTGNCAGGTGCTCGTCCCTGCGCCTGAGGCCACAGAGCTGCATTGAGTCTGCCAG
 ACGCACAGTATCTCAGGGGTGTGGCCGGGAGACCCCGGCAGGGCCAGGATCTGCGTGGGA
 ATGGGCTCTTCAGGCGCAGGCCAGTATAACAAAGGGTTTTTGGG

Restriction Sites: NotI-NotI

ACCN: NM_024111

Insert Size: 1600 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 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](#)

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_024111.2](#), [NP_077016.1](#)

RefSeq Size: 1578 bp

RefSeq ORF: 669 bp

Locus ID: 79094

UniProt ID: [Q9BUX1](#)

Cytogenetics: 15q15.1

Domains: ChaC

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (a).