

Product datasheet for **SC316427**

CARNS1 (NM_020811) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CARNS1 (NM_020811) Human Untagged Clone
Tag:	Tag Free
Symbol:	CARNS1
Synonyms:	ATPGD1
Vector:	<u>pCMV6 series</u>



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_020811, the custom clone sequence may differ by one or more nucleotides

```

ATGCTCCTTTGCTGTCCCTGCTTGGCTGATGAAGGTGCCAGCACCCGGGCAGCCGGT
GAGGCAGCCCTGCTAGTCTCAAGGCTGTGAGCTTCCACCCTGGGGGCTGACATTCTG
GATGACTTTGTCCCCCGCGCGTGTGCCACCTACTTTTGGCAGGCCTGGGCTGGGCT
GGCCGGGGCCGAGAGGCAGCAGAACTCGCCCGTGACCTGACCTGCCCCACAGGAGCTTCG
GCTGAGCTGGCCCGCTGCTGGAGGACCGCTGCTGACAAGGCAGTTGCTGGCCACGAG
GGTGGTGTGGCTGTGCCAGCAACCCTGGCTTTCACCTACAAGCCGCCGGGCTGCTGCGG
GGAGGGGATGCCAGCCTAGGGCTACGGCTGGTGGAGCTGAGTGGCAAAGAGGGCCAGGAG
ACGCTGGTGAAAGAGGAAGTGGAGGCTTTTCTGCGCTCCGAGGCCCTGGTGATATCCTG
CAGGTAGCTGTGAAGCTCAGTGGCTGGCGCTGGCGGGGGCGCAGGCATGGCGTCTGCAC
CCGCGGGCAGAGCTGGGTGCAGTGGTGGACACAGTGTGGCGCTGCTGGAGAAGCTGGAG
GAGGAGGAGAGTGTCTGGTGGAGGCTGTGTACCCACCTGCCAGCTGCCCTGCTCAGAT
GGTCTTACCCGGCCCCGGCTGGCCGTGCGAATCTGTGCTGTGGTGTGTGCGACACAG
GGTGATAGGCCACTGCTGAGCAAGGTGGTGTGCGCGTGGGCCGCGGGGACCGCCCTCTA
CGGCACCAACAACCTCCCTGCCGAGGACGCTGGAGGTGGCGCTGGCCAGTGCAGGCTGGGC
GAGGAGGCGCAGGTGGCGCTGTGCGGCAGCGCTCAAGGCGGCGGCGAGGCGCGCTG
GCCGCCGTGCTGGCTCTGGAGGCCGGCCTGAGTGCCGAGCAGCGCGGCGGCGCCGGGCG
CACACGGACTTCTGGCGTGGATTTCGCGCTGACAGCGCGCGGCGGCGTGTGACCCCA
GTGGCCCTGGAGCTGAACGGCGGCTGTGTCTGGAGGCGTGCGGCGCGCTGGAGGGGCTG
TGGGCCGCGCGCGGCTGGGGCGGCGGCGGCGACGAGGCGGTGGCGGCGCGCTGGTGGAG
ACCATGCTTCGGCGGTGCGCGCTGCTCATGGAGGAAAACAGCTGCTGGTGGTGGC
GCTGGCGGCGTCAGCAAGAAGTTCGTGTGGAGGCGGCGCGGCTACGGGCTCCAGCTG
GACCTCGTGGAGTCAGACCCCAACCACTTTCATCCAGTTGGTACAGACCTTCATCCAC
TTTGACATGACAGAGCACCGGAGGATGAGGAGAACGCACGGCTGCTGGCAGAGTTGGT
CGGGCTCGCGGCTCAAGCTAGATGGCTGCTTCTCCTACTGGGATGACTGCCTGGTGCTC
ACAGCCCTGCTCTGCCAGGAGTAGGTGTGCCCTGCAGCTCCCCAGCTGCCATGCGCCTG
GCTAAGCAGAAGAGCCTCACCCAGCTGCACCTGTTGCACCACCATGGCCACCCTGGCCT
GCGCCCTCCCTCCATGCTGTGCCCTGCTGCCACTGGAGAGTGAGGCTGATGTGGAGAGG
GCCGTGCACACAGGTACCCCTGCCAGGTGTATGAAGCTGGAGTTCGGGGCAGGTGCAGTG
GGTGTCCGGCTGGTAGAGGATGCCACAGTGCCATGAGCACTTTCCCGGATTACCCGA
GACTTGCAGGGGCGAGGCCGACCACCCAGGCATTGGGCTGGGCTGGGGCAATGCCATGCTG
CTGATGGAGTTTGTGGAGGGCACCGAGCAGACGTGGACCTGGTGTGTTTGGTGGGCGG
TTGCTGGCTGCCTTTGTCTCCGACAATGGCCCTACGAGGCTGCCTGGCTTCACTGAGACG
GCGGCCTGCATGCCCACCGGGCTGGCACCAGAGCAGGAGGCACAGATGGTTCAGGCAGCC
TTCCGCTGTTGCTGGGCTGCGGTTGCTCGATGGAGTCTTCAACGTGGAGCTCAAGCTG
ACCGGGGCTGGGCTCGGCTTATCGAGATCAACCCCGCATGGGTGGCTTCTACCTGCGT
GATTGGATCCTGGAGCTCTATGGTGTGACCTGCTGCTGGCTGCTGTTATGGTGGCCTGT
GGCTTGGCTCTGCCCTGCCACCCGCCCACGTGCTCGTGCCATCTGGTGGGCGTCATG
TGCTTTGTGTCCAGCACCTGCAGGCCCTGAGTTCCACCGCCAGCCGTGAGACCTGCAG
GCCCTGCACGACCGTGGACTGCTACGCCTCAATCTGCTGGAGGAGGCCCTGGTGCCTGGC
GAGTATGAGGAGCCCTACTGCAGTGTGGCTGTGCCGAGCCAGCCACCGAGGCGCGT
CTCCGCTGCTGGGCTCTGCCAGGCTGGGCATCGATGGGCCAGCTACCCTGTTGCC
CACTTCTGTCTCACTTCAAA

```

Restriction Sites: Please inquire
ACCN: NM_020811

OTI Disclaimer:	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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<u>NM_020811.1</u> , <u>NP_065862.1</u>
RefSeq Size:	3956 bp
RefSeq ORF:	2484 bp
Locus ID:	57571
UniProt ID:	<u>A5YM72</u>
Cytogenetics:	11q13.2
Gene Summary:	CARNS1 (EC 6.3.2.11), a member of the ATP-grasp family of ATPases, catalyzes the formation of carnosine (beta-alanyl-L-histidine) and homocarnosine (gamma-aminobutyryl-L-histidine), which are found mainly in skeletal muscle and the central nervous system, respectively (Drozak et al., 2010 [PubMed 20097752]).[supplied by OMIM, Apr 2010] Transcript Variant: This variant (2) lacks an alternate exon in the 5' region resulting in translation initiation at a downstream AUG, compared to variant 1. The resulting isoform (2) has a shorter N-terminus, compared to isoform 1.