

## Product datasheet for **MR226464**

### Carns1 (NM\_134148) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Carns1 (NM_134148) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Carns1
Synonyms:	A1790298; Atpgd1; mKIAA1394
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR226464 representing NM\_134148  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCTCTGCCTGGATCCACTGGGTACGGAGTGGGACTCCAAGGACCTGGATGAAAGGAAGAACCATGGA  
 AAAGCGGTGCTGGCCTGCCACCCACAGGCTGCTCCCTGGGCCCTGGCGCCAGGATATCAGCCTGGATTG  
 CAAGGGCTCCCCGGAAGAGACTGAGGCTCGGGCCTGGACTGTGTACTACTACGGTCTCCTTCAGAGTTGT  
 CTGCAGCAAGCTGGCCTTCTGAGACCCAGGATCGCAGCCAGGCACCTCGTACAGGCTGCCTGGGGCAG  
 AGGTGACCTTGTGCATTCTGGTTCTCCAGCACCTTCTATCTCTGTTGCTGGAGGTTGGGTCCAGAG  
 CCCTGAAACATGCTCCTTGCCTGTCCCTGCTTGGCTGATGAAGGTGGCAACTCCAGGCCAAGAGGGT  
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 CTGCTGATGAGGTGGTTGCTGTCCAGCAGAGTGGTGTGGCCGTGCCAGCTACCTGGCTTTCACCTATA  
 GGCTCCGGGGTCTTCGGGGAGGGGATGCCAGCCCTGGACTCCGGCTGGTGGAACTCAGTGGGAAGGA  
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 CGTATCTGTGCAGTGGTGTGTCGGATTCAGGGTATAGGCCCTACTGAGTAAGGTGGTGTGTGGCTGG  
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 GAGGAGGCAGCGGCAGCGCCGCTGGTGGAGACTATGCTGCGGCGCTCAGGGGCCACCTCATGGACGGCA  
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 ACCTGAAGCTAGATGGCTGCTTCTCCTTCTGGGATGACTGCTTGGTGTACTGCTCCTCTGCGGTGA  
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 TGTGCTGGGCCAGCCCTGCTGAGGCTGTACCCTGCTAGGCATCTGTCAGGGCTTGGGCATTGACA  
 GGCCAACTACCCTGTTGCCATTTCTGTCTCATTTCAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR226464 representing NM\_134148  
Red=Cloning site Green=Tags(s)

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MLCLDPLGTEWDSKDLGKEEPWKSAGLPPTGCFPGPWQDISLDCKGSPEETEARAWTVYYYGLLQSC
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EAVLLVSKAVSFYPGGLTFLDDFVPPRHATYFLAGLGPESGRGKEAAELARNLTCPGTSSLSQLLENR
LLMRWLLSQQSGVAVPATLAFTYRPPGLLRGGDASPGLRLVELSGKEGQETLVKEEVEAFVHSEALGDAS
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EEAAAAPLVETMLRRSGRHLMDGKQLLVIGAGGVSKKFVWEAARDYGLTLHLVESDPNHFAQLVQTFIH
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GLQPALPAHPRARGYLVGIMCLVSQHLQLLSSPSRETLQTLHDQGQLRLNLEEALIPGQYEYPYCNVA
CAGPSPAACHRLLGICQGLGIDRPNYPVAHFLSHFK
    
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

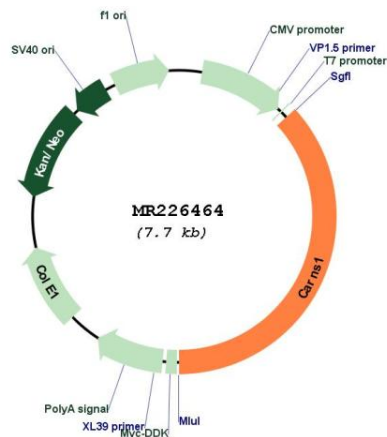


**ACCN:** NM\_134148

**ORF Size:** 2841 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\\_134148.2](#), [NP\\_598909.2](#)
- RefSeq Size:** 3968 bp
- RefSeq ORF:** 2844 bp
- Locus ID:** 107239
- Cytogenetics:** 19 A
- MW:** 102.6 kDa
- Gene Summary:** Catalyzes the synthesis of carnosine and homocarnosine. Carnosine is synthesized more efficiently than homocarnosine.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR226464