

Product datasheet for **MR205383**

Car12 (NM_178396) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Car12 (NM_178396) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Car12
Synonyms:	2310047E01Rik; AI314958; CA-XII; Ca12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205383 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCTCACCGCAGCCTGCGCGGACTGTCGTCTCTGTTGGTGATCCTTAAGAAGCAGCCTTCCAGCT
CAGCCCCACTCAACGGATCCAAGTGGACCTATGTTGGTCTGCTGGGAAAAGAAGTGGTCCAAGAAGTA
CCCATCGTGTGGAGGCCCTCTGCAGTCCCCGATAGACCTACATAGCGACATCCTTCAGTATGATGCTAGC
CTTGCAACCCTCCAGTTCCAAGTTACAACGTGTCTGTTGAAAAGCTGTTGAACCTGACCAATGATGGCC
ATTCAGTGAGACTGAATCTGAACCTCAGACATGTACATCCAGGGTCTCCAGCCTCACCACTACAGAGCAGA
GCAGCTGCACTTGCACTGGGGAAACCGCAATGACCCCCATGGCTCTGAACACACCGTGAGTGGGAAGCAC
TTTGCTGCCGAGCTGCACATTGTCCATTATAACTCAGACCTGTACCCTGACTTCAGCACCCGCAAGTGACA
AGTCCGAAGGCCTCGCTGTCTTGTCTTATTGAGATAGGCTCCGCCAATCCGTCATATGACAAGAT
CTTCAGCCATCTTCAACATGTTAAGTATAAAGGCCAACAGGTGCTCATCCAGGCTTCAACATTGAAGAA
CTTCTGCCGAGAGCCCTGGCGAATATTACCGCTACGAAGGGTCCCTGACTACACCTCCTTGCTACCCTA
CCGTGCTCTGGACAGTTTTCCGAAACCCTGTGCAGATTTCCAGGAGCAGCTGCTGGCTTTGGAGACAGC
TCTGTACTTCACACACATGGATGATCCTACCCCCAGAGAAATGATCAACAACCTCCGGCAGGTCCAGAAG
TTCGATGAGAGGCTGGTGTATATCTCCTCCGACAAGGACTGCTTACCGACACAGGACTGATTTGGGTA
TCATCCTTTCAGTGGCCCTGGCTGGCGTCTTGGCATCTCCATTGTTCTGGCAGTGTCTATTTGGCTCTT
CAAAAGGAAGAAGAGCAAAAAGGTGACAACAAGGGAGTCATTTATAAACCGCCATCAAGAAGGAGGCT
GAGGTCCACGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >MR205383 protein sequence
 Red=Cloning site Green=Tags(s)

MPHRSLRATVLLLLVILKKQPSSAPLNGSKWTVVGPAGEKNWSKKYPSCGGLLQSPIDLHSDILQYDAS
 LAPLQFQGYNVSVKLLNLNDGHSVRLNLSNDMYIQGLQPHHYRAEQLHLHWGNRNDPHGSEHTVSGKH
 FAAELHIVHYNLDLYPDFSTASDKSEGLAVLAVLIEIGSANPSYDKIFSHLQHVKYKQQVLIIPGFNIEE
 LLPESPGYEYRYEGSLTPPCYPTVLWTVFRNPVQISQEQLLALETALYFTHMDDPTPREMINNFRQVQK
 FDERLVYISFRQGLLTDGLSLGIILSVALAGLVGISIVLAVSIWLFKRKSKKGDNDKGVYKPAIKKEA
 EVHA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_178396

ORF Size: 1065 bp

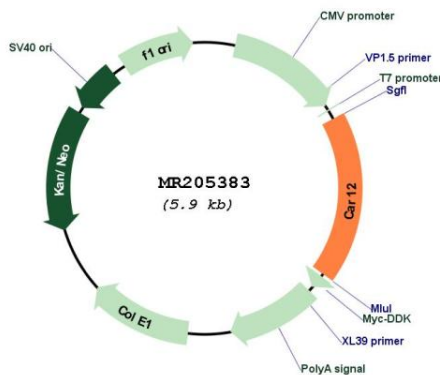
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

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:	<ol style="list-style-type: none"> 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_178396.3</u> , <u>NP_848483.2</u>
RefSeq Size:	3716 bp
RefSeq ORF:	1065 bp
Locus ID:	76459
UniProt ID:	<u>Q8CI85</u>
Cytogenetics:	9 C
MW:	39.7 kDa
Gene Summary:	<p>This gene encodes a membrane-bound member of the alpha carbonic anhydrase family of enzymes that catalyze the reversible hydration of carbon dioxide to bicarbonate. These proteins participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]</p>

Product images:



Circular map for MR205383