

Product datasheet for **RG201187**

Carbonic Anhydrase XI (CA11) (NM_001217) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Carbonic Anhydrase XI (CA11) (NM_001217) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Carbonic Anhydrase XI
Synonyms:	CA-RP; CA-RP II; CA-XI; CARP-2; CARPX1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201187 representing NM_001217 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGGCTGCAGCTCGTCTGAGCGCCCTCGAGCGCTGGTACTCTGGGCTGCACTGGGGGCAGCAGCTC
ACATCGGACCAGCACCTGACCCCGAGGACTGGTGGAGCTACAAGGATAATCTCCAGGGAACTTCGTGCC
AGGGCCTCCTTTCTGGGGCTGGTGAATGCAGCGTGGAGTCTGTGTGCTGTGGGAAGCGGCAGAGCCCC
GTGGATGTGGAGCTGAAGAGGGTCTTTATGACCCCTTCTGCCCCATTAAGGCTCAGCACTGGAGGAG
AGAAGCTCGGGGAACCTTGTAACAACACCGGCCGACATGTCTCCTTCCTGCCTGCACCCGACCTGTGGT
CAATGTGTCTGGAGGTCCCTCCTTTACAGCCACCGACTCAGTGAAGTGGGCTGCTGTTTGGAGCTCGC
GACGGAGCCGGCTCGGAACATCAGATCAACCACAGGGCTTCTCTGCTGAGGTGCAGCTCATTCACTTCA
ACCAGGAATCTACGGGAATTTACAGCGCTGCCTCCCGCGGCCCAATGGCCTGGCCATTCTCAGCCTCTT
TGTCAACGTTGCCAGTACCTCTAACCCATTCTCAGTCGCTCCTTAACCGCGACACCATCACTCGCATC
TCCTACAAGAATGATGCCTACTTTCTCAAGACCTGAGCCTGGAGCTCCTGTTCCCTGAATCCTTCGGCT
TCATCACCTATCAGGGCTCTCTCAGCACCCCGCCTGCTCCGAGACTGTACCTGGATCCTCATTGACCG
GGCCCTCAATATCACCTCCCTTCAGATGCACTCCCTGAGACTCCTGAGCCAGAATCCTCCATCTCAGATC
TTCCAGAGCCTCAGCGGTAACAGCCGGCCCTGCAGCCCTTGGCCACAGGGCACTGAGGGGCAACAGGG
ACCCCGGCACCCCGAGAGGCGCTGCCGAGGCCCAACTACCGCCTGCATGTGGATGGTGTCCCCATGG
TCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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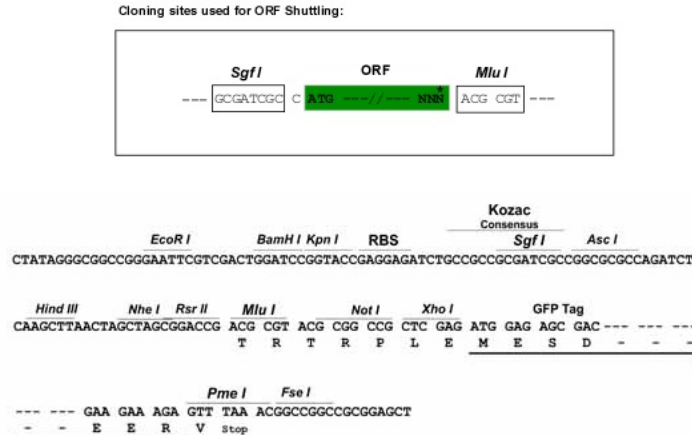
Protein Sequence: >RG201187 representing NM_001217
 Red=Cloning site Green=Tags(s)

MGAAARLSAPRALVLWAALGAAAHIGPAPDPEDWWSYKDNLQGNFVPGPPFWGLVNAAWSLCAVGRQSP
 VDVELKRVLYDPFLPPLRLSTGGEKLRGTLYNTGRHVSFLPAPRPVVNVSGGPLLYSHRLSELRLLFGAR
 DGAGSEHQINHQGFAEVQLIHFNQEL YGNFSAASRGPNGLA ILSLFVNVASTSNPFLSRLLNRTITRI
 SYKNDAYFLQDLSLELLFPESFGFITYQGS LSTPPCSETVTWILIDRALNITSLQMHSRLLSQNPPSQI
 FQSLSGNSRPLQPLAHRALRGNRDPHRPERRCRGPNYRLHVDGVPHGR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001217

ORF Size: 984 bp

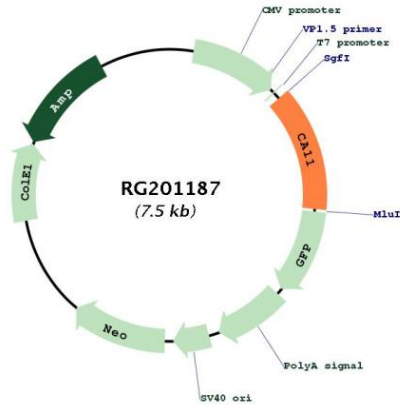
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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:	NM_001217.5
RefSeq Size:	1686 bp
RefSeq ORF:	987 bp
Locus ID:	770
UniProt ID:	O75493
Cytogenetics:	19q13.33
Domains:	carb_anhydrase
Protein Families:	Druggable Genome, Secreted Protein
Gene Summary:	<p>Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They 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. They show extensive diversity in tissue distribution and in their subcellular localization. CA XI is likely a secreted protein, however, radical changes at active site residues completely conserved in CA isozymes with catalytic activity, make it unlikely that it has carbonic anhydrase activity. It shares properties in common with two other acatalytic CA isoforms, CA VIII and CA X. CA XI is most abundantly expressed in brain, and may play a general role in the central nervous system. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RG201187