

## Product datasheet for **SC122585**

### Carbonic Anhydrase IX (CA9) (NM\_001216) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Carbonic Anhydrase IX (CA9) (NM_001216) Human Untagged Clone
Tag:	Tag Free
Symbol:	Carbonic Anhydrase IX
Synonyms:	CAIX; MN
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene sequence for NM\_001216 edited  
 CAGCCTGCTCCCTCCAGGCTTGCTCCTCCCCACCCAGCTCTCGTTTCCAATGCACGTA  
 CAGCCCGTACACACCGTGTGCTGGGACACCCACAGTCAGCCGCATGGCTCCCCTGTGCC  
 CCAGCCCTGGCTCCCTCTGTTGATCCCGGCCCTGCTCCAGGCCCTACTGTGCAACTGC  
 TGCTGTACTGTGCTTCTGATGCCTGTCCATCCCAGAGGTTGCCCGGATGCAGGAGG  
 ATTCCCCTTGGGAGGAGGCTCTTCTGGGAAGATGACCCACTGGGCGAGGAGGATCTGC  
 CCAGTGAAGAGGATTACCCAGAGAGGAGGATCCACCCGAGAGGAGGATCTACCTGGAG  
 AGGAGGATCTACCTGGAGAGGAGGATCTACCTGAAGTTAAGCCTAAATCAGAAGAAGAGG  
 GCTCCCTGAAGTTAGAGGATCTACCTACTGTTGAGGCTCCTGGAGATCCTCAAGAACCC  
 AGAATAATGCCACAGGGACAAAGAAGGGGATGACCAGAGTCATTGGCGTATGGAGGCG  
 ACCCGCCTGGCCCCGGGTGCCCCAGCCTGCGCGGGCCGCTTCCAGTCCCCTGGGATA  
 TCCGCCCCAGCTCGCCGCTTCTGCCCGCCCTGCGCCCTGGAACCTCTGGGCTTCC  
 AGCTCCCCTGGCTCCCAGAACTGCGCTGCGCAACAATGGCCACAGTGTGCAACTGACC  
 TGCTCCTGGGCTAGAGATGGCTCTGGTCCCAGGCGGGAGTACCGGGCTCTGCAGCTGC  
 ATCTGCACTGGGGGCTGCAGGTCGTCCGGCTCGGAGCACACTGTGGAAGGCCACCGTT  
 TCCTGCCGAGATCCACGTGGTTCACCTCAGCACCGCCTTTGCCAGAGTTGACGAGGCT  
 TGGGGCGCCCGGAGGCTGGCCGTGTTGGCCGCTTTCTGGAGGAGGGCCCGAAGAAA  
 ACAGTGCCTATGAGCAGTTGCTGTCTCGTTGGAAGAAATCGCTGAGGAAGGCTCAGAGA  
 CTCAGGTCACAGGACTGGACATATCTGCACTCCTGCCCTGACTTCAGCCGCTACTTCC  
 AATATGAGGGGTCTCTGACTACACCGCCCTGTGCCAGGGTGTGATCTGGACTGTGTTTA  
 ACCAGACAGTGTGCTGAGTGTAAAGCAGCTCCACACCTCTCTGACACCTGTGGGGAC  
 CTGGTACTCTCGGCTACAGTGAACCTCCGAGCGACGACGCTTTGAATGGGCGAGTGA  
 TTGAGGCTCCTTCCCTGCTGGAGTGGACAGCAGTCTCGGGCTGCTGAGCCAGTCCAGC  
 TGAATTCCTGCCTGGCTGCTGGTACATCTAGCCCTGGTTTTTGGCCTCCTTTTTGCTG  
 TACCAGCGTCGCTTCTTGTGAGATGAGAAGCAGCACAGAAGGGGAACCAAAGGGG  
 GTGTGAGTACCAGCCAGCAGAGGTAGCCGAGACTGGAGCCTAGAGGCTGGATCTTGGAG  
 AATGTGAGAAGCCAGCCAGAGGATCTGAGGGGAGCCGTAACCTGCTCTGCTGCTCA  
 TTATGCCACTTCTTTAACTGCAAAGAAATTTTTAAATAAATAATTTATAATAAAAAA  
 AAAAAAAAAAAAAAAAAA

**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_001216 unedited  
 CCGCCACTTGAGAATGTAACGTTCACTATAGGCGGCCGNAATTCGCACGAGGCAGCC  
 TGCTCCCCTCCAGCTTGCTCCTCCCCACCCAGCTCTCGTTTCCAATGCACGTACAGCGC  
 CGTACACACCGTGTGCTGGGACACCCACAGTCAGCCGCATGGCTCCCCTGTGCCCCAGC  
 CCCTGGCTCCCTCTGTTGATCCCGGCCCTGCTCCAGGCCCTACTGTGCAACTGCTGCTG  
 TCACTGCTGCTTCTGATGCCTGTCCATCCCAGAGGTTGCCCGGATGCAGGAGGATTCC  
 CCCTTGGGAGGAGGCTCTTCTGGGAAGATGACCCACTGGGCGAGGAGGATCTGCCCACT  
 GAAGAGGATTACCCAGAGAGGAGGATCCACCCGAGAGGAGGATCTACCTGGAGAGGAG  
 GATCTACCTGGAGAGGAGGATCTACCTGAAGTTAAGCCTAAATCAGAAGAAGAGGGCTCC  
 CTGAAGTTAGAGGATCTACCTACTGTTGAGGCTCCTGGAGATCCTCAAGAACCCAGAAT  
 AATGCCACAGGGACAAAGAAGGGGATGACCAGAGTCATTGGCGTATGGAGGCGACCCG  
 CCCTGGCCCCGGGTGCCCCAGCCTGCGCGGGCCGCTTCCAGTCCCCTGGGATAATCCGC  
 CCCCAGCTCGCCGCTTCTGCCCGCCCTGCGCCCTGGAACCTCTGNGCTTCCAGCTC  
 CCGCCGCTCCCAGAACTGCGCTGCGCAACAATGGCCACAGTGTGCAACTGACCTGCCT  
 CCTGNGCTAGAGATGGCTCTGGTCCCAGGCGGGAGTACCGGGCTCTGCAGCTGCATCTG  
 CACTGGGGGCTGCAGGTCGTCCGGCTCGGAGCACACTGTGGAAGGCCAC

**Restriction Sites:** Please inquire

**ACCN:** NM\_001216

**Insert Size:** 1639 bp

<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001216.1</a> , <a href="#">NP_001207.1</a>
<b>RefSeq Size:</b>	1552 bp
<b>RefSeq ORF:</b>	1380 bp
<b>Locus ID:</b>	768
<b>UniProt ID:</b>	<a href="#">Q16790</a>
<b>Cytogenetics:</b>	9p13.3
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Nitrogen metabolism
<b>Gene Summary:</b>	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 IX is a transmembrane protein and is one of only two tumor-associated carbonic anhydrase isoenzymes known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12. [provided by RefSeq, Jun 2014]