

Product datasheet for **SC335062**

CA12 (NM_001293642) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CA12 (NM_001293642) Human Untagged Clone
Tag:	Tag Free
Symbol:	CA12
Synonyms:	CA-XII; CAXII; HsT18816; T18816
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001293642, the custom clone sequence may differ by one or more nucleotides

ATGCCCCGGCGCAGCCTGCACGCGGCGCCGTGCTCCTGCTGGTGATCTTAAAGGAACAGCCTTCCAGCC
 CGGCCCCAGTGAACGGTTCCAAGTGGACTTATTTTGTGAAGCTGAACCTGCCCTCGGACATGCACATCCA
 GGGCCTCCAGTCTCGCTACAGTGCCACGCAGCTGCACCTGCACCTGGGGGAACCGAATGACCCGCACGGC
 TCTGAGCACACCGTCAGCGGACAGCACTTCGCCGCCGAGCTGCACATTGTCCATTATAACTCAGACCTTT
 ATCCTGACGCCAGCACTGCCAGCAACAAGTCAGAAGGCCCTCGTGTCTGGCTGTTCTCATTGAGATGGG
 CTCCTTCAATCCGTCCTATGACAAGATCTTCAGTCACCTTCAACATGTAAAGTACAAAGGCCAGGAAGCA
 TTCGTCCCGGATTCAACATTGAAGAGCTGCTTCCGGAGAGGACCGCTGAATATTACCGCTACCGGGGGT
 CCCTGACCACACCCCTTGCAACCCCACTGTGCTCTGGACAGTTTTCCGAAACCCCGTGCATTTTCCCA
 GGAGCAGCTGCTGGCTTTGGAGACAGCCCTGTACTGCACACACATGGACGACCCTTCCCCAGAGAAATG
 ATCAACAACCTCCGGCAGGTCCAGAAGTTCGATGAGAGGCTGGTATACACCTCCTTCTCCCAAGGCATCA
 TCCTCTCACTGGCCCTGGCTGGCATTCTTGGCATCTGTATTGTGGTGGTGGTGTCCATTTGGCTTTTCAG
 AAGGAAGAGTATCAAAAAGGTGATAACAAGGGAGTCATTTACAAGCCAGCCACCAAGATGGAGACTGAG
 GCCCAGCTGA

Restriction Sites:	SgfI-MluI
ACCN:	NM_001293642
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).


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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_001293642.1, NP_001280571.1</u>
RefSeq Size:	3996 bp
RefSeq ORF:	852 bp
Locus ID:	771
Cytogenetics:	15q22.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Nitrogen metabolism
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. This gene product is a type I membrane protein that is highly expressed in normal tissues, such as kidney, colon and pancreas, and has been found to be overexpressed in 10% of clear cell renal carcinomas. Three transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jun 2014]</p> <p>Transcript Variant: This variant (3) lacks two alternate in-frame exons compared to variant 1. The resulting isoform (3) has the same N- and C-termini but is shorter compared to isoform 1.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>