

Product datasheet for RC206616

Carbonic Anhydrase I (CA1) (NM_001738) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Carbonic Anhydrase I (CA1) (NM_001738) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Carbonic Anhydrase I
Synonyms:	CA-I; CAB; Car1; HEL-S-11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206616 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAAGTCCAGACTGGGGATATGATGACAAAAATGGTCCTGAACAATGGAGCAAGCTGTATCCCATTG
CCAATGGAATAACCAAGTCCCCTGTTGATATTAACCAGTGAAACCAACATGACACCTCTCTGAAACC
TATTAGTGTCTCCTACAACCCAGCCACAGCCAAAGAAATTATCAATGTGGGGCATTCTTCCATGTAAT
TTTGAGGACAACGATAACCGATCAGTGCTGAAAGGTGGTCTTTCTCTGACAGCTACAGGCTCTTTCAGT
TCCATTTTCACTGGGCGAGTACAATGAGCATGGTTCAGAACATACAGTGGATGGAGTCAAATATTCTGC
CGAGCTTCACGTAGCTCACTGGAATTCGCAAAGTACTCCAGCCTTGCTGAAGCTGCCTCAAAGGCTGAT
GGTTTGGCAGTTATTGGTGTGGTGAAGGTTGGTGAAGGCAACCCAAAGCTGCAGAAAGTACTTGATG
CCCTCAAAGCAATTAACCAAGGGCAAACGAGCCCCATTACAAATTTGACCCCTCTACTCTCCTTCC
TTCATCCTGGATTTCTGGACCTACCCTGGCTCTCTGACTCATCCTCCTTTATGAGAGTGAACCTGG
ATCATCTGTAAGGAGAGCATCAGTGTGAGCTCAGAGCAGCTGGCACAATCCGCAGCCTTCTATCAAATG
TTGAAGGTGATAACGCTGTCCCATGCAGCACAACAACCGCCCAACCAACCTCTGAAGGGCAGAACAGT
GAGAGCTTCATTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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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_001738.5](#)

RefSeq Size: 1319 bp

RefSeq ORF: 786 bp

Locus ID: 759

UniProt ID: [P00915](#)

Cytogenetics: 8q21.2

Domains: carb_anhydrase

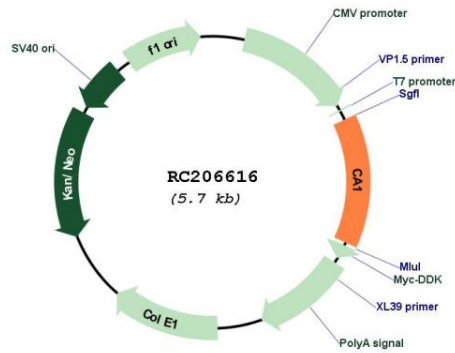
Protein Families: Druggable Genome

Protein Pathways: Nitrogen metabolism

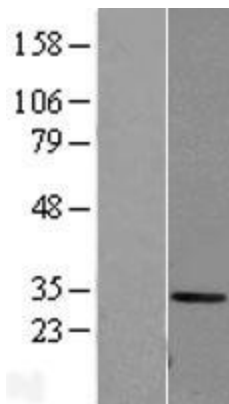
MW: 28.9 kDa

Gene Summary: 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. This CA1 gene is closely linked to the CA2 and CA3 genes on chromosome 8. It encodes a cytosolic protein that is found at the highest level in erythrocytes. Allelic variants of this gene have been described in some populations. Alternative splicing and the use of alternative promoters results in multiple transcript variants. [provided by RefSeq, Nov 2016]

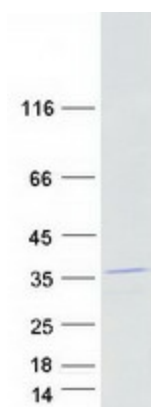
Product images:



Circular map for RC206616



Western blot validation of overexpression lysate (Cat# [LY400658]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206616 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CA1 protein (Cat# [TP306616]). The protein was produced from HEK293T cells transfected with CA1 cDNA clone (Cat# RC206616) using MegaTran 2.0 (Cat# [TT210002]).