

Recombinant Human carbonic anhydrase XI, His-tagged

Cat. No. CA11-265H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	CA11, 24-328aa, Human, His tag, E.coli
Species	Human
Source	E.coli
ProteinLength	24-328 a.a.
Description	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. CA11 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. CA11 is most abundantly expressed in brain, and may play a general role in the central nervous system. Recombinant human CA11 protein, fused to His-tag at N-terminus, was expressed in E.coli.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol
Molecular Mass	36.3kDa (326aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSH MHIGPAPDPE DWWSYKDNLQ GNFPVGPFPFW

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GLVNAAWSLC AVGKRQSPVD VELKRVLYDP FLPPRLSTG GEKLRGTLYN
 TGRHVSFLPA PRPVNVVSGG PLYSHRLSE LRLFGARDG AGSEHQINHQ
 GFSAEVQLIH FNQELYGNFS AASRGPNGLA ILSLFVNVAS TSNPFLSRLL
 NRDTITRISY KNDAYFLQDL SLELLFPESF GFITYQGSLS TPPCSETVTW
 ILIDRALNIT SLQMHSRLRL SQNPSSQIFQ SLSGNSRPLQ PLAHRALRGN
 RDPRHPERRC RGPNYRLHVD GVPHGR

Purity >85% by SDS - PAGE

Storage Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.

Concentration 1 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name CA11 carbonic anhydrase XI [Homo sapiens]

Official Symbol CA11

Synonyms CA11; carbonic anhydrase XI; carbonic anhydrase-related protein 11; CA RP XI; carbonic anhydrase related protein 2; carbonic anhydrase related protein XI; CARP2; CARPX1; CA-XI; CARP-2; CARP XI; CA-RP II; carbonic anhydrase-related protein 2; carbonic anhydrase-related protein XI;

Gene ID 770

mRNA Refseq NM_001217

Protein Refseq NP_001208

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MIM	604644
UniProt ID	O75493
Chromosome Location	19q13.3
Function	NOT carbonate dehydratase activity;

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