Carbonic Anhydrase 14 Protein, Human (His)

Cat. No.:	HY-P7727
Synonyms:	rHuCarbonic Anhydrase 14, His; Carbonic Anhydrase 14; Carbonate Dehydratase XIV; Carbonic Anhydrase XIV; CA14;
Species:	Human
Source:	E. coli
Accession:	Q9ULX7 (G19-M290)
Gene ID:	23632
Molecular Weight:	Approximately 40.0 kDa

PROPERTIES

AA Sequence	H H H H H H G Q H W T Y E G P H G Q D H W P A S Y P E C G N N A Q S P I D I Q T D S V T F D P D L P A L Q P H G Y D Q P G T E P L D L H N N G H T V Q L S L P S T L Y L G G L P R K Y V A A Q L H L H W G Q K G S P G G S E H Q I N S E A T F A E L H I V H Y D S D S Y D S L S E A A E R P Q G L A V L G I L I E V G E T K N I A Y E H I L S H L H E V R H K D Q K T S V P P F N L R E L L P K Q L G Q Y F R Y N G S L T T P P C Y Q S V L W T V F Y R R S Q I S M E Q L E K L Q G T L F S T E E E P S K L L V Q N Y R A L Q P L N Q R M V F A S F I Q A G S S Y T T G E M
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Solution.
Formulation	Supplied as a 0.2 μm filter solution of 20 mM Tris, 150 mM NaCl, 10% Glycerol, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	Carbonic AnHYdrase XIV is a type I membrane enzyme highly expressed in all parts of the central nervous system. And it exhibits lower expression in adult liver, heart, kidney, urinary bladder, and skeletal muscle[1]. The carbonic anhydrasekl (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins[2].

The carbonic anhydrases are indentified as metalloenzyme for its zinc ion prosthetic group, it can catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons. They also take part in maintaining acid-base balance in blood and other tissues[2].

REFERENCES

[1]. D Hewett-Emmett, et al. Functional diversity, conservation, and convergence in the evolution of the alpha-, beta-, and gamma-carbonic anhydrase gene families. Mol Phylogenet Evol

[2]. K Fujikawa-Adachi, et al. Human carbonic anhydrase XIV (CA14): cDNA cloning, mRNA expression, and mapping to chromosome 1. Genomics. 1999 Oct 1;61(1):74-81.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA