

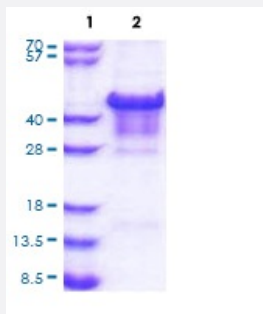
Bioactive

CA14 (Human) Recombinant Protein

Catalog # P7928

Size 100 ug

Applications



Specification

Product Description

Human CA14 (Q9ULX7, 16 a.a. - 290 a.a.) partial length recombinant protein with His tag expressed in *Escherichia coli*.

Sequence

ADGGQHWTYEGPHGQDHWPAASYPECGNNASPIDIQTDSVTFDPDLPALQPHGYDQPGTEPLD
LHNNGHTVQLSLPSTLYLGGLPRKYAAQLHLHWGQKGSPGGSEHQINSEATFAELHIVHYDS
YDSLSEAAERPQGLAVLGILIEVGETKNIAIEHILSHLHEVRHKDQKTSVPPFNLRELLPKQLGQYF
RYNGSLTTPPCYQSVLWTVFYRRSQISMEQLEKLQGTLFSTEEEPSKLLVQNYRALQPLNQRMFV
ASFIQAGSSYTTGEM

Host

Escherichia coli

Theoretical MW (kDa)

33.2

Form

Liquid

Preparation Method

Escherichia coli expression system

Purity

> 85% by SDS-PAGE

Activity

Specific activity is > 700 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1.0 pmole of 4-nitrophenyl acetate to 4-nitrophenol per minute at pH 7.5 at 37°C.

Quality Control Testing

3 ug by SDS-PAGE under reducing condition and visualized by Coomassie blue stain.

Storage Buffer

In 20mM Tris-HCl pH 8.0 (10% glycerol, 0.15 M NaCl, 1 mM DTT)

Storage Instruction

Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — CA14

Entrez GeneID[23632](#)**Protein Accession#**[Q9ULX7](#)**Gene Name**

CA14

Gene Alias

-

Gene Description

carbonic anhydrase XIV

Omim ID[604832](#)**Gene Ontology**[Hyperlink](#)**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. CA XIV is predicted to be a type I membrane protein and shares highest sequence similarity with the other transmembrane CA isoform, CA XII; however, they have different patterns of tissue-specific expression and thus may play different physiologic roles. [provided by RefSeq]

Other Designations

OTTHUMP00000014540|carbonic dehydratase

Pathway

- [Nitrogen metabolism](#)

Disease

- [Tobacco Use Disorder](#)