

Carbonic Anhydrase 4 Protein, Human (His)

Cat. No.:	HY-P7720
Synonyms:	rHuCarbonic Anhydrase 4, His; Carbonic Anhydrase 4; Carbonate Dehydratase IV; Carbonic Anhydrase IV; CA4
Species:	Human
Source:	E. coli
Accession:	P22748 (A19-K283)
Gene ID:	762
Molecular Weight:	Approximately 30.0 kDa

PROPERTIES

AA Sequence	<pre> A E S H W C Y E V Q A E S S N Y P C L V P V K W G G N C Q K D R Q S P I N I V T T K A K V D K K L G R F F F S G Y D K K Q T W T V Q N N G H S V M M L L E N K A S I S G G G L P A P Y Q A K Q L H L H W S D L P Y K G S E H S L D G E H F A M E M H I V H E K E K G T S R N V K E A Q D P E D E I A V L A F L V E A G T Q V N E G F Q P L V E A L S N I P K P E M S T T M A E S S L L D L L P K E E K L R H Y F R Y L G S L T T P T C D E K V V W T V F R E P I Q L H R E Q I L A F S Q K L Y Y D K E Q T V S M K D N V R P L Q Q L G Q R T V I K H H H H H H </pre>
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-HCl, 100 mM NaCl, pH 8.5.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	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	The human carbonic anhydrase IV (CA4) gene, located on chromosome 17q22, was the first identified membrane-bound isozyme in the 16-member carbonic anhydrase (CA) gene family and contains 1,170 base pairs. The CA4 enzyme is involved in the formation of gastric acid and participates in acid-base homeostasis. CA4 is expressed in normal human stomach tissues. CA4 may serve an important role in gastric cancer (GC) tumorigenesis by inhibiting cellular proliferation via
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regulating the expression of cell cycle-associated proteins. CA4 may serve as a diagnostic biomarker and a potential therapeutic target in GC^[1].

REFERENCES

[1]. Bujiang Wang, et al. Carbonic anhydrase IV inhibits cell proliferation in gastric cancer by regulating the cell cycle. *Oncol Lett.* 2020 Oct;20(4):4.

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

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