

## Carbonic Anhydrase 14 Protein, Human (HEK293, His)

Cat. No.:	HY-P72867
Synonyms:	Carbonic anhydrase 14; Carbonate dehydratase XIV; CA-XIV; CA14
Species:	Human
Source:	HEK293
Accession:	Q9ULX7/NP_036245.1 (A16-M290)
Gene ID:	23632
Molecular Weight:	45-48 kDa

### PROPERTIES

<b>AA Sequence</b>	<pre> M L F S A L L L E V   I W I L A A D G 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           </pre>
<b>Biological Activity</b>	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Endotoxin Level</b>	<1 EU/µg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	Carbonic Anhydrase 14 Protein is an enzyme that catalyzes the reversible hydration of carbon dioxide. Its main function is to facilitate the conversion of carbon dioxide to bicarbonate ions and protons, and vice versa. This enzymatic activity is crucial
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in various physiological processes, including acid-base balance regulation, respiration, and maintenance of cellular pH homeostasis. Carbonic Anhydrase 14 Protein plays a pivotal role in carbon dioxide transport and metabolism within the body.

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

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