

CA12/Carbonic Anhydrase 12 Protein, Human (P.pastoris, His)

Cat. No.:	HY-P71720
Synonyms:	CA 12; CA XII; CA12; Carbonic anhydrase XII; Carbonic dehydratase; CAXII; FLJ20151; HsT18816; T18816; Tumor antigen HOM RCC 3.1.3; Tumor antigen HOM-RCC-3.1.3
Species:	Human
Source:	P. pastoris
Accession:	O43570 (25A-301S)
Gene ID:	771
Molecular Weight:	Approximately 33.1 kDa

PROPERTIES

AA Sequence	<pre> A P V N G S K W T Y F G P D G E N S W S K K Y P S C G G L L Q S P I D L H S D I L Q Y D A S L T P L E F Q G Y N L S A N K Q F L L T N N G H S V K L N L P S D M H I Q G L Q S R Y S A T Q L H L H W G N P N D P H G S E H T V S G Q H F A A E L H I V H Y N S D L Y P D A S T A S N K S E G L A V L A V L I E M G S F N P S Y D K I F S H L Q H V K Y K G Q E A F V P G F N I E E L L P E R T A E Y Y R Y R G S L T T P P C N P T V L W T V F R N P V Q I S Q E Q L L A L E T A L Y C T H M D D P S P R E M I N N F R Q V Q K F D E R L V Y T S F S Q V Q V C T A A G L S </pre>
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O.
Storage & Stability	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.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The CA12 protein, also known as Carbonic Anhydrase 12, plays a pivotal role in the reversible hydration of carbon dioxide. This enzyme catalyzes the conversion of carbon dioxide to bicarbonate ions and protons, contributing significantly to essential physiological processes. Its enzymatic activity is integral to the regulation of pH levels, aiding in the maintenance of acid-base balance within the body. As a member of the carbonic anhydrase family, CA12 is involved in the fundamental
-------------------	--

biochemical reactions related to carbon dioxide transport and buffering in tissues, underscoring its importance in cellular homeostasis.

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