

## Carbonic Anhydrase 2 Protein, Rat, Recombinant (His)

### General Information

Synonyms:	Carbonate dehydratase II;Carbonic anhydrase II (CA-II);Cyanamide hydratase CA2;Carbonic anhydrase 2;Ca2
Protein Construction:	2-260 aa
Species:	Rat
Expression Host:	E. coli
Accession:	P27139
Molecular Weight:	31.7 kDa (predicted)
AA Sequence:	SHHWGYSKSNPENWHKEFPIANGDRQSPVDITGTAQHDPQLLICYDKVASKSIVNNGHSFNVEFDD SQDFAVLKEGPLSGSYRLIQHFHWGSSDQGSEHTVNKKKYAAELHLVHWNTKYGDFGKAVQHPDGLAV LGIFLKIGPASQGLQKITEALHSIKTKGKRAAFANFDPCSLPGNLDYWTPGSLTTPPLECVTWIVLKEPITVS SEQMSHFRKLNFNSEGEAEELMVDNWRPAQPLKNRKIKASFK

### QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

### Preparation and Storage

Reconstitution:	Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.
Stability & Storage:	Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots. <small>Actual storage temperature shall be subject to the COA.</small>
Shipping:	In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

## A DRUG SCREENING EXPERT

---

Essential for bone resorption and osteoclast differentiation. Reversible hydration of carbon dioxide. Contributes to intracellular pH regulation in the duodenal upper villous epithelium during proton-coupled peptide absorption. Stimulates the chloride-bicarbonate exchange activity of SLC26A6.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481