

## 32-7092: Recombinant Human Carbonic Anhydrase 1/CA1 (C-6His)(Discontinued)

**Gene :** CA1  
**Gene ID :** 759  
**Uniprot ID :** P00915

### Description

Source: E.coli.  
MW :29.93kD.

Recombinant Human Carbonic Anhydrase 1 is produced by our E.coli expression system and the target gene encoding Ala2-Phe261 is expressed with a 6His tag at the C-terminus. Carbonic Anhydrase 1 (CA1) is a cytosolic enzyme, belonging to the alpha-carbonic anhydrase family. It is highly expressed in erythrocytes and acts as an early marker for erythroid differentiation. Carbonic anhydrase 1 plays a important role in many biological processes such as calcification, cellular respiration, bone resorption, acid-base balance. It is activated by imidazole, histamine, L-adrenaline, L- and D-histidine, and L- and D-phenylalanine. At the same time, It is inhibited by sulfonamide derivatives and coumarins. In addition, CA1 is a zinc metalloenzyme that has reversible hydration of carbon dioxide. It can hydrate cyanamide to urea.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 10% Glycerol, pH 8.0.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** ASPDWGYDDKNGPEQWSKLYPIANGNNQSPVDIKTSETKHDTSLKPISVSYNPATAKEIINVGHSHFVNFEDND  
NRSVLKGGPFSDSYRLFQFHFHWGSTNEHGSEHTVDGVKYSaelHVAHWNSAKYSSLAEAASKADGLAVIGV  
LMKVGEANPKLQKVLDALQAIKTKGRAPFTNFDPSTLLPSSLDFWTYPGSLTHPPLYESVTWIICKESISVSSEQ  
LAQFRSLLSNVEGDNAVPMQHNNRPTQPLKGRTVRASFLHHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.  
**Biological Activity :** Specific Activity is greater than 780.34pmol/min/ug