

## 32-2202: Carbonic Anhydrase-1 Recombinant Protein

**Alternative Name :** CA-1,CA1,CAI,CA-I,Carbonate dehydratase I,Carbonic anhydrase I,Carbonic anhydrase 1,Car1.

### Description

Source : Escherichia Coli. Recombinant Human Carbonic anhydrase 1 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 281 amino acids (1-261 a.a) and having a molecular mass of 31 kDa. Carbonic anhydrase 1 is fused to 20 amino acid His-Tag at N-terminus and purified by conventional chromatography techniques. Carbonic anhydrase 1 is a zinc metalloenzyme that catalyses reversible hydration of CO<sub>2</sub> (CO<sub>2</sub> + H<sub>2</sub>O = HCO<sub>3</sub><sup>-</sup> + H<sup>+</sup>). Carbonic anhydrase 1 is essential to many biological processes such as cellular respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. Carbonic anhydrase 1 is abundant in erythrocytes and an early marker for erythroid differentiation.

### Product Info

<b>Amount :</b>	25 µg
<b>Purification :</b>	Greater than 95.0% as determined by SDS-PAGE.
<b>Content :</b>	The Carbonic Anhydrase-1 protein solution contains 20mM Tris-HCl, pH-8, 1mM DTT and 10% Glycerol.
<b>Storage condition :</b>	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
<b>Amino Acid :</b>	MGSSHHHHHH SSGLVPRGSH MASPDWGYDD KNGPEQWSKL YPIANGNNQS PVDIKTSETK HDTSLKPISV SYNPAKAI INVGHFSFHVN FEDNDNRSVL KGGPFSDSYR LFQFHFHWGS TNEHGSEHTV DGVKYS AELH VAHWNSAKYS SLAEAAASKAD GLAVIGVLMK VGEANPKLQK VLDALQAIKT KGKRAPFTNF DPSTLLPSSL DFWTYPGSLT HPPLYESVTW IICKESISVS SEQLAQFRSL LSNVEGDNAV PMQHNNRPTQ PLKGRTVRAS F.