

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 CO₂ (CO₂ + H₂O = HCO₃⁻ + H⁺). 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

Amount : 25 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Content : The Carbonic Anhydrase-1 protein solution contains 20mM Tris-HCl, pH-8, 1mM DTT and 10% Glycerol.

Storage condition : 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.

Amino Acid : MGSSHHHHHH SSSLVPRGSH MASPDWGYDD KNGPEQWSKL YPIANGNNQS PVDIKTSETK
HDTSLKPISV SYNPAKAI INVGHFSFHVN FEDNDNRSVL KGGPFSDSYR LFQFHFHWGS TNEHGSEHTV
DGVKYS AELH VAHWNSAKYS SLAE AASKAD GLAVIGVLMK VGEANPKLQK VLDALQAIKT KGKRAPFTNF
DPSTLLPSSL DFWTYPGSLT HPPLYESVTW IICKESISVS SEQLAQFRSL LSNVEGDNAV PMQHNNRPTQ
PLKGRTRVRS F.

