Creative Enzymes®

Carbonic anhydrase from E. coli, recombinant

Cat. No. NATE-1669

Lot. No. (See product label)

Introduction

Description	The carbonic anhydrases (or carbonate dehydratases) form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons (or vice versa), a reversible reaction that occurs relatively slowly in the absence of a catalyst. The active site of most carbonic anhydrases contains a zinc ion; they are therefore classified as metalloenzymes.
Synonyms	Carbonate dehydratase; CAN; yadF

Product Information

Species	E. coli
Source	E. coli
Form	Liquid
Formulation	Liquid in 50 mM potassium phosphate pH 7.4, 50 mM sodium chloride, 0.5 mM DTT, 0.5 mM EDTA, and 2.5% glycerol.
EC Number	EC 4.2.1.1
Molecular Weight	This protein is fused with 6x His tag at N terminus and the protein has a calculated MW of 27 kDa (240aa).
Purity	> 95% by SDS-PAGE
Activity	>1,000 pmol/min/ug
Concentration	1 mg/ml
Unit Definition	One unit is defined as the amount of enzyme that hydrolyze 1.0 pmole of 4-nitrophenyl acetate to 4-nitrophenol per minute at pH 7.5 at 37°C.

Storage and Shipping Information

Storage	Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -70°C. Avoid repeated freezing and thawing cycles.