

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.