

AR03030PU-N

E. coli Carbonic anhydrase / can (1-220, His-tag) - Purified

Alternate names:

Carbonate dehydratase 2, Carbonic anhydrase 2, cynT2, yadF

Quantity:

0.1 mg

Concentration:

1.0 mg/ml (determined by Bradford assay)

Background:

Carbonic anhydrase (CA) is an enzyme that catalyses rapid conversion of carbon dioxide to bicarbonate and protons ($\text{CO}_2 + \text{H}_2\text{O} \rightleftharpoons \text{HCO}_3^- + \text{H}^+$). Most carbonic anhydrases contain a zinc ion in their active site and the primary function of this enzyme is known to maintain acid-base balance in blood and other tissues, and to help transport carbon dioxide of tissues. Carbonic anhydrases have been found in all kingdoms of life.

Uniprot ID:
[P61517](#)
NCBI:
[AP_000787.1](#)
GeneID:
[944832](#)
Species:

E. coli

Source:

E. coli

Format:
State: Liquid purified protein

Purity: >95% by SDS PAGE

Buffer System: 20mM Tris pH 8.0, 1mM DTT, 10 % glycerol

Description:

Recombinant carbonic anhydrase, fused to His-tag, was expressed in E.coli and purified by conventional chromatography techniques.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MKDIDTLISN NALWSKMLVE EDPGFFEKLA QAQKPRFLWI
GCSDSRVPAE RLTGLEPGEL FVHRNVANLV IHTDLNCLSV VQYAVDVLEV EHIICGHYG
CGGVQAAVEN PELGLINNWL LHIRDIWFKH SLLGEMPQE RRLDTLCELN VMEQVYNLGH
STIMQSAWKR GQKVTIHGWA YGIHDGLLRD LDVTATNRET LEQRYRHGIS NLKCLKHANHK

Molecular weight: 27 kDa (240 aa), confirmed by MALDI-TOF

Storage:

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Sawaya MR., et al (2006) J Biol Chem.; 17;281(11):7546-55.

Pictures:

Carbonic anhydrase, 1-220 aa E.coli, His tagged

