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AR09402PU-L Human Carbonic anhydrase 3 (1-260) - Purified

Alternate names: CA-III, CA3, Carbonate dehydratase III, Carbonic anhydrase III

Quantity: 0.5 mg

Concentration: 1.0 mg/ml (determined by Bradford assay)

Background: CA3, also known as carbonic anhydrase III, is an enzyme that catalyses rapid conversion of carbon dioxide to bicarbonate and protons (CO2 + H2O = HCO3 + H+). This protein is involved in a variety of biological processes, including respiration, calcifica-tion, acid-base balance, bone resorption and the formation of aqueous humor, cerebrospinal fluid, saliva and gastric juice. It contains 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.

Uniprot ID: P07451

NCBI: AAH04897

GeneID: 761

Species: Human

Source: E. coli

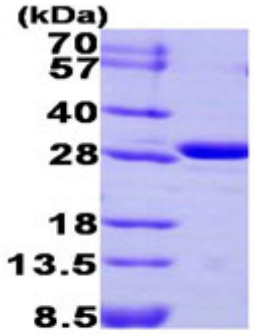
Format:
State: Liquid purified protein
Purity: >90% by SDS - PAGE
Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1 mM DTT

Description: Recombinant CA3 protein was expressed in E.coli and purified by using conventional chromatography techniques.
AA Sequence:
MAKEWGYASH NGPDHWHELF PNAKGENQSP IELHTKDIRH DPSLQPWSVS YDGGSAKTIL
NNGKTCRVVF DDTYDRSMLR GGPLPGPYRL RQFHLHWGSS DDHGSEHTVD GVKYAAELHL
VHWNPKYNTF KEALKQRDGI AVIGIFLKIG HENGEFQIFL DALDKIKTKG KEAPFTKFDP
SCLFPACRDY WTYQGSFTTP PCEECIVWLL LKEPMTVSSD QMAKLRSLLS SAENEPPVPL
VSNWRPPQPI NNRVVRASFK
Molecular weight: 29.5 kDa (260 aa)

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. 281(11):7546-55.

Pictures:



15% SDS-PAGE (3ug)

Recombinant human CA3, 1-260 aa: 15% SDS-PAGE (3 µg)