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**Carbonic anhydrase 1, 1-261aa, Human, His tag, E.coli**

**Cat.NO.: TP01424**

3th Edition

**Synonyms:**CA1, CA-I, CAB

**Description:**Carbonic anhydrase 1(CA1) is a zinc metalloenzyme that catalyses reversible hydration of CO<sub>2</sub> (CO<sub>2</sub> + H<sub>2</sub>O ? HCO<sub>3</sub><sup>-</sup> + H<sup>+</sup>). This protein is fundamental 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.

**Form:**Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

**Molecular Weight:**31.0 kDa (281aa)

**Sequences:**

MGSSHHHHHHSSGLVPRGSHMASPDWGYDDKNGPEQWSKLYPIANGNNQSPVDIKTSETKHDTSLKPISVSYNP  
ATAKEIINVGHSHFVNFEDNDNRSVLKGGPFSDSYRLFQFHFHWGSTNEHGSEHTVDGVKYSAELHVAHWNSAKY  
SSLAEAASKADGLAVIGVLMKVGEANPKLQKVLDALQAIKTKGKRAPFTNFDPSTLLPSSLDFWYTPGSLTHPPLYE  
SVTWIICKESISVSSEQLAQFRSLLSNVEGDNAVPMQHNNRPTQPLKGRTVRASF

**Purity:**> 95% by HPLC

**Concentration:**1 mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.