

**CA13,1-262aa , Human, His tag, E.coli**

**Cat.NO.: TP01390**

3th Edition

**Synonyms:**Carbonic anhydrase 13 , CAXIII

**Description:**CA13 also known as carbonic anhydrase 13 belongs to the alpha-carbonic anhydrase family. The carbonic anhydrase from a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction that occurs relatively slowly in the absence of catalyst. The active site of most carbonic anhydrases contains a zinc ion; they are classified as metalloenzymes. There are at least five distinct CA families (alpha, beta, gamma, delta, and epsilon). These families have no significant amino acid sequence similarity and in most cases are thought to be an example of convergent evolution. The alpha-CAs are found in humans. Recombinant human CA13, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**Form:**Liquid, In Phosphate buffered saline (pH7.4) containing 10% glycerol, 1mM DTT

**Molecular Weight:**31.8kDa (285aa) confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSPMGSMRSLSWG YREHNGPIHWKEFFPIADGDQQSPIEIKTKEVKYDSSLRPLSIKY  
DPSSAKIISNSGHSFNVD FDDTENKSVLRGGPLTGSYRLRQVHLHWGSADDHGSEHIVDGVSYAAELHV VHWNSD  
KYPSFVEAAHEPDGLAVLGVFLQIGEPNSQLQKITDTLDSIKEK GKQTRFTNFDLLSLLPPSWDYWTYPGSLTVPPLL  
ESVTWIVLKQPINISSQQLAKFRSLLCTAEGEAAAFLVSNHRPPQPLKGRKVRASFH

**Purity:**> 95% by HPLC

**Concentration:**0.5mg/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.