

Carbonic anhydrase 2, 1-260aa, Human, Recombinant, E.coli

Cat.NO.: TP01425

3th Edition

Synonyms:CA-II, CAC

Description:Carbonic anhydrase 2 (CA2) is one of fourteen forms of human ? carbonic anhydrases. Carbonic anhydrase catalyzes reversible hydration of carbon dioxide. CA2 is a cytosolic enzyme with the highest activity among all known CAs. Mutations in the CA2 gene result in the CA2 deficiency syndrome, an autosomal recessive disorder that produces osteopetrosis, renal tubular acidosis and cerebral calcification. Recombinant human CA2 was expressed in E.coli and purified by using conventional chromatography.

Form:Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 50mM NaCl, 10% glycerol

Molecular Weight:29.2 kDa (260aa), confirmed by MALDI-TOF

Sequences:

MSHHWGYGKHNGPEHWHKDFPIAKGERQSPVDIDTHTAKYDPSLKPLSVSYDQATSLRILNNGHAFNVEFDDSQD
KAVLKGGLDGTYRLIQFHFHWGSLDGGQSEHTVDKKKYAAELHLVHWNTKYGDFGKAVQQPDGLAVLGIFLKVG
SAKPGLQKVVDVLDISIKTKGKSADFTNFDPRGLLPESLDYWTYPGSLTTPPLLECVTWIVLKEPISVSSEQVLKFRKL
NFNGEGEPEELMVDNWRPAQPLKNRQIKASFK

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.