CA11, 24-328aa, Human, His tag, E.coli

Cat.NO.: TP01388

3th Edition

Synonyms: Carbonic anhydrase-related protein 11, CARPX1

Description: Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA11 is likely a secreted protein, however, radical changes at active site residues completely conserved in CA isozymes with catalytic activity, make it unlikely that it has carbonic anhydrase activity. It shares properties in common with two other acatalytic CA isoforms, CA VIII and CA X. CA11 is most abundantly expressed in brain, and may play a general role in the central nervous system. Recombinant human CA11 protein, fused to His-tag at N-terminus, was expressed in E.coli.

Form: Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Molecular Weight:36.3kDa (326aa)

Sequences:
MGSSHHHHHHSSGLVPRGSHMHIGPAPDPEDWWSYKDNLQGNFVPGPPFWGLVNAAWSLCAVGKRQSPVDVE
LKRVLYDPFLPPLRLSTGGEKLRGTLYNTGRHVSFLPAPRPVVNVSGGPLLYSHRLSELRLLFGARDGAGSEHQIN
HQGFSAEVQLIHFNQELYGNFSAASRGPNGLAILSLFVNVASTSNPFLSRLLNRDTITRISYKNDAYFLQDLSLELLFP
ESFGFITYQGSLSTPPCSETVTWILIDRALNITSLQMHSLRLLSQNPPSQIFQSLSGNSRPLQPLAHRALRGNRDPRH
PERRCRGPNYRLHVDGVPHGR

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.