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32-6688: CA13 Human

Application : Functional Assay

Alternative Name : Carbonic Anhydrase XIII, Carbonate Dehydratase XIII, EC 4.2.1.1, CA-XIII,Â Carbonic, Anhydrase 13, CAXIII.

Description

Source: Escherichia Coli.
Sterile Filtered clear solution.
Carbonic Anhydrase XIII, also known as CA13 is a member of the alpha-carbonic anhydrase family, which catalyzes the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction which occurs relatively slowly in the absence of catalyst. Furthermore, the active site of nearly all carbonic anhydrases contains a zinc ion; they have been classified as metalloenzymes. At least five distinct CA families (, , , and) have been found. These families have no significant a.a sequence resemblance and in just about all cases are considered to be an example of convergent evolution. The -CAs have been demonstrated in humans.Â
CA13 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 285 amino acids (1-262a.a) and having a molecular mass of 31.8kDa.CA13 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 90.0% as determined by SDS-PAGE.

Content : CA13 protein solution (0.5mg/ml) containing Phosphate buffered saline (pH7.4),10% glycerol and 1mM DTT.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks.Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.

Amino Acid : MGSSHHHHHH SSGLVPRGSP MGSMSRLSWG YREHNGPIHW KEFFPIADGD QQSPIEIKTK EVKYDSSLRP LSIKYDPSSA KIISNSGHSF NVDFDDTENK SVLRGGPLTG SYRLRQVHLH WGSADDHGSE HIVDGVSYAA ELHVVHWNSD KYPSFVEAAH EPDGLAVLGV FLQIGEPNSQ LQKITDTLDS IKEKGKQTRF TNFDLLSLLP PSWDYWTYPG SLTVPPLLES VTWIVLKQPI NISSQQLAKF RSLLCTAEGE AAAFLVSNHR PPQPLKGRKV RASFH.

Application Note

Specific activity is > 2,500 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1.0 pmole of 4-nitrophenyl acetate to 4-nitrophenol per minute at pH 7.5 at 37C.