

### 32-2198: CA3 His Recombinant Protein

**Alternative Name :** Car3,CAIII,Carbonic anhydrase 3,EC 4.2.1.1,Carbonic anhydrase III,Carbonate dehydratase III,CA-III.

#### Description

Source : Escherichia Coli. Carbonic anhydrase III Human Recombinant produced in E.Coli, and having a molecular mass of 33.9 kDa. CAIII is expressed with an amino-terminal hexahistidine tag. The CA-III is purified by proprietary chromatographic techniques. Carbonic anhydrase (carbonate dehydratase) is a family of metalloenzymes (enzymes that contain one or more metal atoms as a functional component of the enzyme) that catalyze the rapid (and reversible) conversion of carbon dioxide to bicarbonate and protons, a reaction that occurs rather slowly in the absence of a catalyst. Carbonic anhydrase greatly increases the rate of the reaction, with typical catalytic rates of the different forms of this enzyme ranging between 10<sup>4</sup> and 10<sup>6</sup> reactions per second. The active site of most carbonic anhydrases contains a zincion. CAIII is a cytoplasmic isoenzyme, but is released into the circulation following injury.

#### Product Info

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 95.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	Supplied in 10mM Tris-HCl (pH 8), 250mM NaCl, 0.5mM DTT, 1.5mM Cysteine, and 50% Glycerol.
<b>Storage condition :</b>	CAIII although stable at 4°C for 1 week, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

