

**Recombinant Mouse Carbonic Anhydrase 4/CAIV/CA4 Protein(C-6His)**

**Cat.NO.: TP06181**

3th Edition

**Synonyms:**CA4;CAIV;CA-IV;Car4;Carbonate dehydratase IV;carbonic anhydrase 4;carbonic anhydrase IVRP17;carbonic dehydratase IV;EC4.2.1.1;retinitis pigmentosa 17;RP17

**Description:**Carbonic anhydrase 4(CA4) is an enzyme that belongs to the alpha-carbonic anhydrase family. CA4 consists of a signal peptide (residues1-17), an ectodomain (residues18-277) and a propeptide (residues278-305), which is removed in the mature form. it is predominantly expressed in the embryo. CA4 can catalyzes the reversible reaction of  $\text{CO}_2 + \text{H}_2\text{O} = \text{HCO}_3^- + \text{H}^+$ , and stimulates the sodium/bicarbonate transporter activity of SLC4A4. Studies have shown that this protein have a role in inherited renal abnormalities of bicarbonate transport. Alpha-carbonic anhydrase family participate in avariety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor. They show extensive diversity in tissue is attribution and in their sub cellular localization.

**Form:**PBS

**Molecular Weight:**30.5 kDa

**Sequences:**Glu18-Ser277

**Purity:**> 95% by HPLC

**Concentration:**

**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.