

## 32-7094: Recombinant Human Carbonic Anhydrase 4/CA4 (C-6His)

**Gene :** CA4  
**Gene ID :** 762  
**Uniprot ID :** P22748

### Description

Source: E.coli.  
MW :31.43kD.

Recombinant Human Carbonic Anhydrase 4 is produced by our E.coli expression system and the target gene encoding Ala19-Lys283 is expressed with a 6His tag at the C-terminus. Carbonic Anhydrase 4 (CA4) belongs to the alpha-carbonic anhydrase family. Alpha-carbonic anhydrase is a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. Carbonic anhydrase 4 is a glycosylphosphatidyl-inositol-anchored membrane isozyme expressed on the luminal surfaces of pulmonary (and certain other) capillaries and proximal renal tubules. Carbonic anhydrase 4 may stimulate the sodium/bicarbonate transporter activity of SLC4A4 that acts in pH homeostasis. It may have a role in inherited renal abnormalities of bicarbonate transport. Furthermore, Carbonic anhydrase 4 is essential for acid overload removal from the retina and retina epithelium and acid release in the choriocapillaris.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 100mM NaCl, pH 8.5.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MAESHWCYEVQAESSNYPCLVPVKWGGNCQKDRQSPINIVTTKAKVDKKGRRFFSGYDKKQTTWTVQNNGH  
SVMMLLENKASISGGGLPAPYQAKQLHLHWSLDPYKGEHSLDGEHFAMEMHIVHEKEKGTSRNVKEAQDPE  
DEIAVLAFLEAGTQVNEGFQPLVEALSNIKPEMSTTMAESSLLDLLPKEEKLRYFRYLGSLTTPCDEKVVW  
TVFREPIQLHREQILAFSQKLYDKEQTVSMKDNVRPLQQLGQRTVIKLEHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.  
**Biological Activity :** Specific Activity is greater than 614.96pmol/min/ug