

32-7863: Recombinant Mouse Carbonic Anhydrase 4/CAIV/CA4 (C-6His)

Gene : Ca4
Gene ID : 12351
Uniprot ID : Q64444

Description

Source: Human Cells.
MW :30.5kD.

Recombinant Mouse Carbonic anhydrase 4 is produced by our expression system and the target gene encoding Glu18-Ser277 is expressed. Carbonic anhydrase 4 (CA4) is an enzyme that belongs to the alpha-carbonic anhydrase family. CA4 consists of a signal peptide (residues 1-17), an ectodomain (residues 18-277) and a propeptide (residues 278-305), which is removed in the mature form. It is predominantly expressed in the embryo. CA4 can catalyze 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 has a role in inherited renal abnormalities of bicarbonate transport. Alpha-carbonic anhydrase family members participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor. They show extensive diversity in tissue distribution and in their subcellular localization.

Product Info

Amount : 10 µg / 50 µg
Content : Supplied as a 0.2 µm filtered solution of 20mM Tris, 150mM NaCl, pH 8.0.
Storage condition : Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Amino Acid : ED SGWCYEIQTKDPRSSCLGPEKWPGACKENQQSPINIVTARTKVNPR LTPFILVG YDQKQQWPIK
NNQHTVEMTLGGGACIIGDLPARYEAVQLHLHWSNGNDNGSEHSIDGRHFAMEMHIVHKKLTSS
KEDSKDKFAVLAFMIEVGDKVNKG FQPLVEALPSISKPHSTSTVRESSLQDMLPPSTKMYTYFRYN
GSLTTPNCDETVIWT VYKQPIKIHKNQFLEFSKNLYYDEDDQKLN MKDNVRPLQLPLGKRQVFKS

Application Note

Endotoxin : Less than 0.1 ng/Åµg (1 IEU/Åµg) as determined by LAL test.