

Recombinant Mouse Carbonic Anhydrase 4/CA4 Protein (aa 18-277, His Tag)

Catalog Number: PKSM040973

Note: Centrifuge before opening to ensure complete recovery of vial contents.

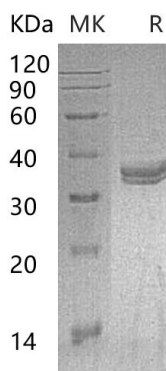
Description

| | |
|----------------------|--|
| Species | Mouse |
| Source | HEK293 Cells-derived Mouse Carbonic Anhydrase 4/CA4 protein Glu18-Ser277, with an C-terminal His |
| Calculated MW | 30.5 kDa |
| Observed MW | 36 kDa |
| Accession | Q64444 |
| Bio-activity | Not validated for activity |

Properties

| | |
|----------------------|---|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Concentration | Subject to label value. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles. |
| Shipping | This product is provided as liquid. It is shipped at frozen temperature with blue ice/ gel packs. Upon receipt, store it immediately at < - 20°C. |
| Formulation | Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

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.

For Research Use Only

Toll-free: 1-888-852-8623
Web: www.elabscience.com

Tel: 1-832-243-6086
Email: techsupport@elabscience.com

Fax: 1-832-243-6017