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.

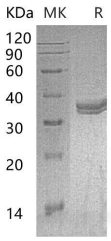
Description

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
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Glu18-Ser277
Accession	Q64444
Calculated Molecular Weight	30.5 kDa
Observed molecular weight	36 kDa
Tag	C-His

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
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.
Reconstitution	Not Applicable

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 (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 CO2+H2O=HCO3-+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.