

Recombinant Human Carbonic Anhydrase 4/CA4 Protein (His Tag)

Catalog No. PKSH032162

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

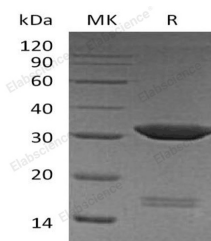
Description

Synonyms	Carbonic Anhydrase 4;Carbonate Dehydratase IV;Carbonic Anhydrase IV;CA-IV;CA4;CAIV;Car4;RP17
Species	Human
Expression Host	E.coli
Sequence	Ala19-Lys283
Accession	P22748
Calculated Molecular Weight	31.4 kDa
Observed molecular weight	30 kDa
Tag	C-His
Bioactivity	Not validated for activity

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, 100mM NaCl, pH 8.5.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

Background

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 glycosylphosphatidylinositol-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

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transport. Furthermore, Carbonic anhydrase 4 is essential for acid overload removal from the retina and retina epithelium and acid release in the choriocapillaris.