

Human CA4/Carbonic Anhydrase IV Protein

Cat. No. CA4-HM204

Description

Source	Recombinant Human CA4/Carbonic Anhydrase IV Protein is expressed from HEK293 with hFc (IgG1) tag at the C-terminus. It contains Ala19-Ser284.
Accession	P22748-1
Molecular Weight	The protein has a predicted MW of 56.26 kDa. Due to glycosylation, the protein migrates to 57-67 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

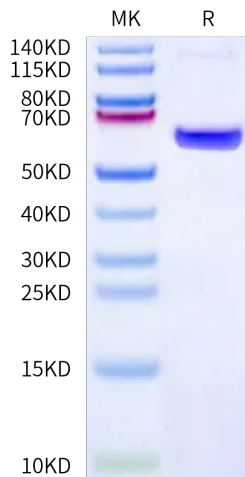
Formulation	Lyophilized from 0.22 μm filtered solution in 25mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Carbonic anhydrase IV is one of 12 active human isozymes and one of four expressed on the extracellular surfaces of certain endothelial and epithelial cells. It is unique in being attached to the plasma membrane by a glycosyl-phosphatidylinositol (GPI) anchor rather than by a membrane-spanning domain. It is also uniquely resistant to high concentrations of sodium dodecyl sulfate (SDS), which allows purification from tissues by inhibitor affinity chromatography without contamination by other isozymes.

Assay Data

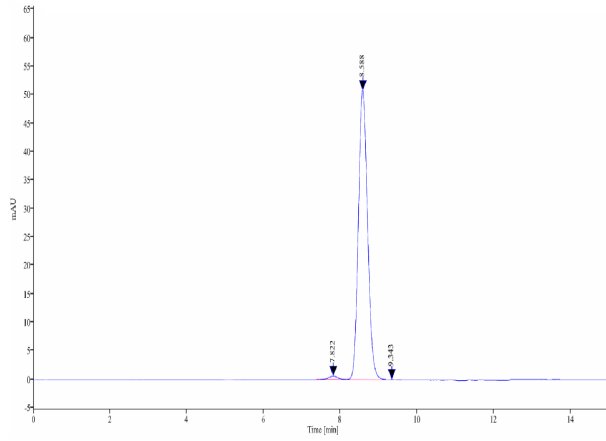
Bis-Tris PAGE



Human CA4 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



The purity of Human CA4 is greater than 95% as determined by SEC-HPLC.

Human CA4/Carbonic Anhydrase IV Protein

Cat. No. CA4-HM204



Assay Data

Bioactivity Data

Measured by its esterase activity. The specific activity is > 5 pmol/min/μg.