Human CA12/Carbonic anhydrase XII Protein

Cat. No. CAS-HM112

Description

Source	Recombinant Human CA12/Carbonic anhydrase XII Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Ala25-Ser301.
Accession	O43570-1
Molecular Weight	The protein has a predicted MW of 32.22 kDa. Due to glycosylation, the protein migrates to 40-50 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

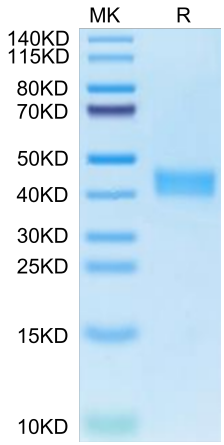
Formulation	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in distilled water.
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 anhydrases (CAs) are a family of enzymes involved in the pH regulation of metabolically active cells/tissues. Carbonic anhydrase XII (CA XII) is a key mediator of several signaling pathways that are involved in cancer development.

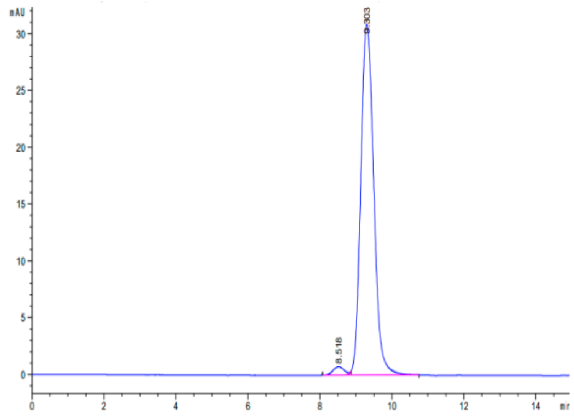
Assay Data

Bis-Tris PAGE



Human CA12 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human CA12 is greater than 95% as determined by SEC-HPLC.

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Bioactivity Data

Measured by its esterase activity. The specific activity is > 40 pmol/min/μg.