Human CA14/Carbonic Anhydrase XIV Protein

Cat. No. CA4-HM214

Description

Source	Recombinant Human CA14/Carbonic Anhydrase XIV Protein is expressed from HEK293 with hFc tag at the C-terminus.
	It contains Ala16-Met290.
Accession	Q9ULX7
Molecular Weight	The protein has a predicted MW of 56.76 kDa. Due to glycosylation, the protein migrates to 65-85 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

Formulation and Storage

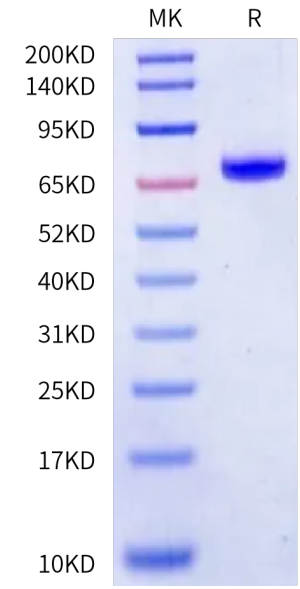
Formulation	Supplied as 0.22 μm filtered solution in 20mM Tris, 150mM NaCl (pH 7.5).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Carbonic anhydrase XIV (CA XIV), a transmembrane protein, highly expressed in the central nervous system, is difficult to recombinantly express and purify in large scale for the measurements of inhibitor binding and drug design. CA XIV belongs to the family of twelve catalytically active CA isoforms in the human body. Disorders in the expression of CA XIV cause serious diseases and CA XIV has been described as a possible drug target for the treatment of epilepsy, some retinopathies, and skin tumors.

Assay Data

Bis-Tris PAGE



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

Bioactivity Data

Measured by its esterase activity. The specific activity is >100 pmol/min/μg.