## Biotinylated Human CA9/Carbonic Anhydrase IX Protein





Description	
Source	Recombinant Biotinylated Human CA9/Carbonic Anhydrase IX Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus
	It contains Gln38-Asp414.
Accession	Q16790
Molecular Weight	The protein has a predicted MW of 43.7 kDa. Due to glycosylation, the protein migrates to 52-65 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 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 Supplied as 0.22 µm filtered solution in 50mM 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

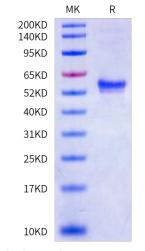
quantities for optimal storage. Please minimize freeze-thaw cycles.

## **Background**

CA9 is a member of the carbonic anhydrases' family, that is often expressed in cancer cells under hypoxic condition. CA9 expression potentially contributes to the regulation of cancer cell differentiation and mediates tumour-associated genes and signalling pathways, including apoptosis, hypoxia, G2M checkpoint, PI3K/AKR/mTOR signalling and TGF-beta signalling pathways.

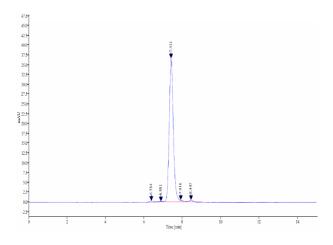
## **Assay Data**

#### **Bis-Tris PAGE**



Biotinylated Human CA9 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

#### **SEC-HPLC**



The purity of Biotinylated Human CA9 is greater than 95% as determined by SEC-HPLC.

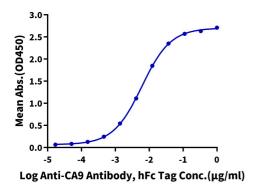


## **Assay Data**

#### **ELISA Data**

# Biotinylated Human CA9, His Avi Tag ELISA

0.05μg Biotinylated Human CA9, His Avi Tag Per Well



Immobilized Biotinylated Human CA9, His Avi Tag at 0.5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-CA9 Antibody, hFc Tag with the EC50 of 6.1ng/ml determined by ELISA.

## **Bioactivity Data**

Measured by its esterase activity. The specific activity is >50 pmol/min/µg.