

Human CA9/Carbonic Anhydrase IX Protein



Cat. No. CA9-HM401

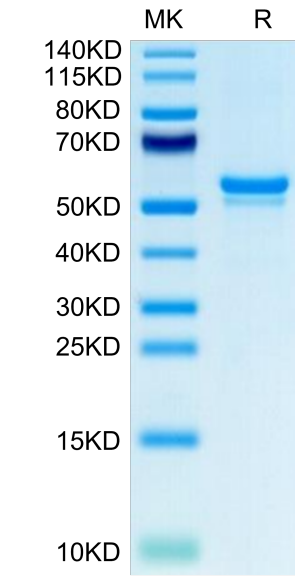
| Description | |
|------------------|--|
| Source | Recombinant Human CA9/Carbonic Anhydrase IX Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus It contains Gln38-Asp414. |
| Accession | Q16790 |
| Molecular Weight | The protein has a predicted MW of 43.7 kDa. Due to glycosylation, the protein migrates to 50-60 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 | Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl (pH 7.4). 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 | |
|---|--|
| 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



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

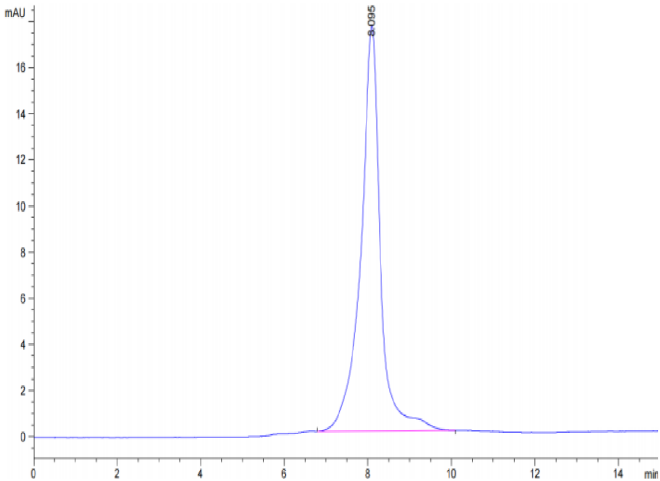
SEC-HPLC

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Assay Data

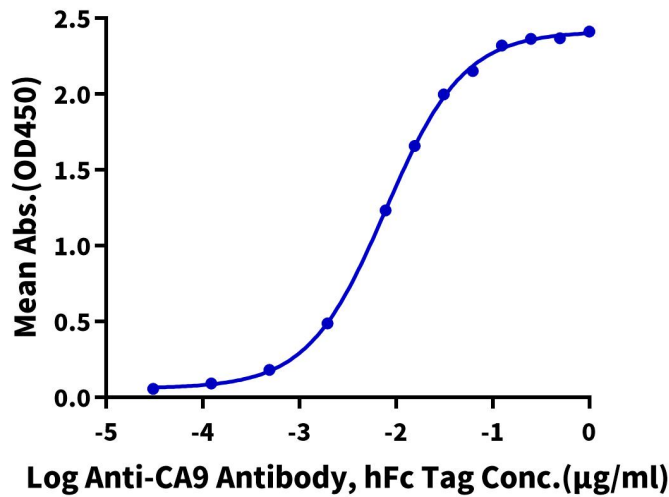


The purity of Human CA9 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human CA9, His Tag ELISA

0.1µg Human CA9, His Tag Per Well



Immobilized Human CA9, His Tag at 1 µg/ml (100 µl/Well) on the plate. Dose response curve for Anti-CA9 Antibody, hFc Tag with the EC50 of 7.8 ng/ml determined by ELISA.

Bioactivity Data

Measured by its esterase activity. The specific activity is >20 pmol/min/µg.