

Human CA9/Carbonic Anhydrase IX Protein

Cat. No. CA9-HM201

Description

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|-------------------------|---|
| Source | Recombinant Human CA9/Carbonic Anhydrase IX Protein is expressed from HEK293 with hFc tag at the C-terminus. It contains Gln38-Asp414. |
| Accession | Q16790 |
| Molecular Weight | The protein has a predicted MW of 66.91 kDa. Due to glycosylation, the protein migrates to 70-80 kDa based on Tris-Bis PAGE result. |
| Endotoxin | Less than 1EU per µg by the LAL method. |
| Purity | > 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC |

Formulation and Storage

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|--------------------|--|
| Formulation | Supplied as 0.22 µm filtered solution in PBS (pH 7.4). |
| 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.

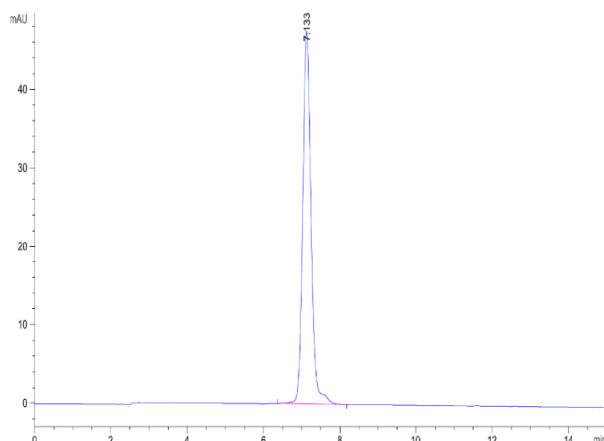
Assay Data

Tris-Bis PAGE



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

SEC-HPLC



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

Human CA9/Carbonic Anhydrase IX Protein

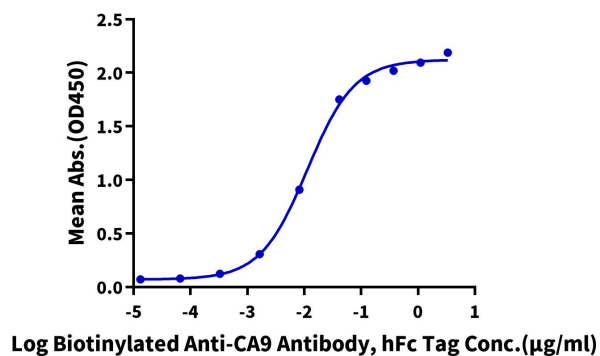
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Assay Data

ELISA Data

Human CA9, hFc Tag ELISA

0.1µg Human CA9, hFc Tag Per Well



Immobilized Human CA9, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-CA9 Antibody, hFc Tag with the EC50 of 11.3ng/ml determined by ELISA.

Bioactivity Data

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