

Cynomolgus CA9/Carbonic Anhydrase IX Protein, Ultra Low Endotoxin

Cat. No. CA9-CM101-UL

Description	
Source	Recombinant Cynomolgus CA9/Carbonic Anhydrase IX Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln38-Asp402.
Accession	A0A2K5VQG9
Molecular Weight	The protein has a predicted MW of 41.03 kDa. Due to glycosylation, the protein migrates to 50-60 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 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 0.22µm filtered solution in PBS (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

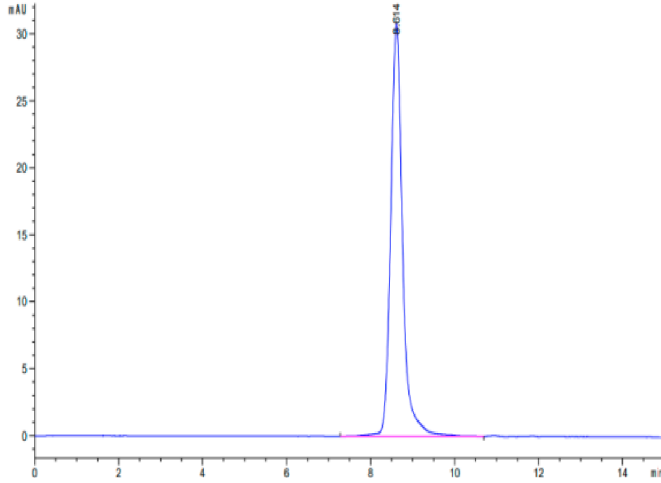
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

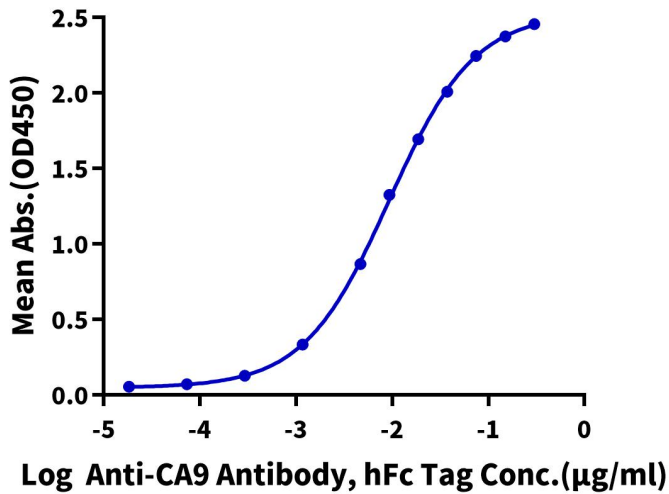


The purity of Cynomolgus CA9 is greater than 95% as determined by SEC-HPLC.

ELISA Data

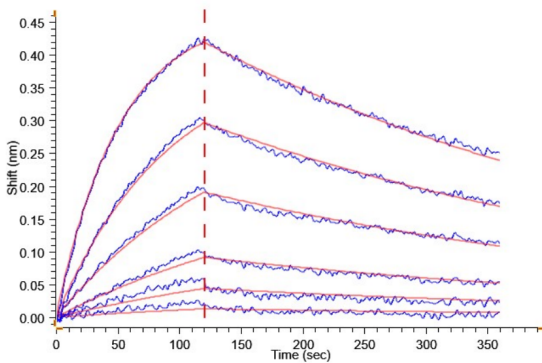
Cynomolgus CA9, His Tag ELISA

0.1µg Cynomolgus CA9, His Tag Per Well



Immobilized Cynomolgus CA9, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-CA9 Antibody, hFc Tag with the EC50 of 9.3ng/ml determined by ELISA (QC Test).

BLI Data



Loaded Anti-CA9 Antibody, hFc Tag on ProA-Biosensor can bind Cynomolgus CA9, His Tag with an affinity constant of 13.60 nM as determined in BLI assay.

Bioactivity Data

Measured by its esterase activity. The specific activity is > 120 pmol/min/µg (QC Test).