

# Mouse CA9/Carbonic Anhydrase IX Protein

Cat. No. CA9-MM101

## Description

<b>Source</b>	Recombinant Mouse CA9/Carbonic Anhydrase IX Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln32-Asp390.
<b>Accession</b>	NP_647466.2
<b>Molecular Weight</b>	The protein has a predicted MW of 43.12 kDa. Due to glycosylation, the protein migrates to 50-53 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per ug by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

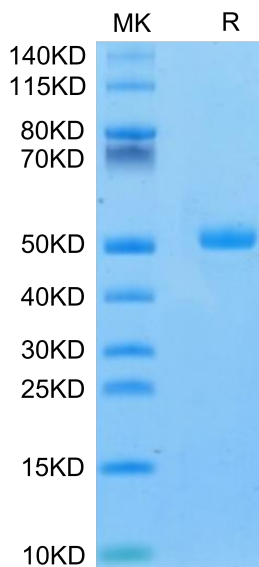
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days 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

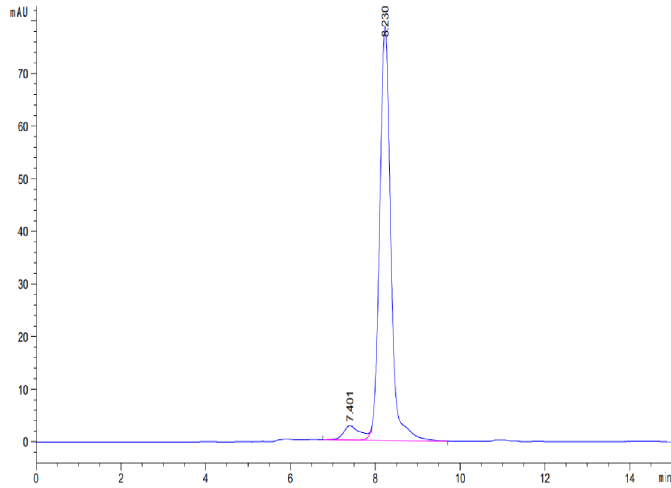
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data



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