# Human Carbonic Anhydrase IX/CA9 (His Tag) recombinant protein

Catalog Number: 501946



#### **General Information**

## Gene Name Synonym

Carbonate dehydratase IX; Carbonic anhydrase IX; Membrane antigen MN; P54/58N; Renal cell carcinoma-associated antigen G250; pMW1

#### **Protein Construction**

A DNA sequence encoding the human carbonic anhydrase IX (CA9) precursor (NP\_001207.2) (Met 1-Asp 414) was expressed with a polyhistidine tag at the C-terminus.

#### **Organism**

Human

## **Expression Host**

**Human Cells** 

## **QC Testing**

## **Activity**

Measured by its esterase activity. The specific activity is >30 pmoles/min/ $\mu$ g, as measured with 1 mM 4-Nitrophenyl acetate and 2.5  $\mu$ g enzyme at 400 nm in 100  $\mu$ L of 12.5 mM Tris, 75 mM NaCl, pH 7.5.

#### **Purity**

> 95 % as determined by SDS-PAGE

#### **Endotoxin**

< 1.0 EU per  $\mu g$  of the protein as determined by the LAL method

#### **Stability**

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}$ C

#### Predicted N terminal

Gln 38

#### **Molecular Mass**

The recombinant human CA9 consists of 388 amino acids and predicts a molecular mass of 42.5 kDa. As a result of glycosylation, rhCA9 migrates with apparent molecular mass of 48 kDa in SDS-PAGE under reducing conditions.

#### **Formulation**

Lyophilized from sterile PBS, pH 7.4

- 1. 5 % trehalose and mannitol are added as protectants before lyophilization.
- 2. Please contact us for any concerns or special requirements.

## **Usage Guide**

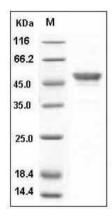
## **Storage**

Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

#### Reconstitution

Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

#### **SDS-PAGE**



Human Carbonic Anhydrase IX / CA9 Protein (His Tag) SDS-PAGE