

# Mouse Carbonic Anhydrase XIV (His Tag) recombinant protein



Catalog Number: 500234

## General Information

### Gene Name Synonym

Carbonate dehydratase XIV; Carbonic anhydrase XIV

### Protein Construction

A DNA sequence encoding the extracellular domain of mouse CA14 (NP\_035927.1) (Met 1-Met 290) was expressed with a C-terminal polyhistidine tag.

### Organism

Mouse

### Expression Host

Human Cells

## QC Testing

### Activity

Measured by its esterase activity. The specific activity is >400 pmoles/min/μg, as measured with 1 mM 4-Nitrophenyl acetate and 0.8 μg enzyme at 400 nm in 100 μL of 12.5 mM Tris, 75 mM NaCl, pH 7.5.

### Purity

> 95 % as determined by SDS-PAGE

### Endotoxin

< 1.0 EU per μg of the protein as determined by the LAL method

### Stability

Samples are stable for up to twelve months from date of receipt at -70°C

### Predicted N terminal

Ala 16

## Molecular Mass

The recombinant mouse CA14 consists of 286 amino acids and has a calculated molecular mass of 32.2 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 45-48 kDa protein in SDS-PAGE under reducing conditions.

## Formulation

Lyophilized from sterile 25mM Tris, 0.15mM NaCl, pH 7.5

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

## Usage Guide

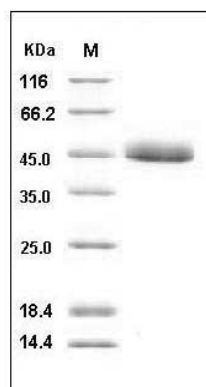
### Storage

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



Mouse Carbonic Anhydrase XIV / Car14 Protein (His Tag) SDS-PAGE