

Human Carbonic Anhydrase XII (His Tag) recombinant protein



Catalog Number: 500054

General Information

Gene Name Synonym

Carbonate dehydratase XII; Carbonic anhydrase XII; Tumor antigen HOM-RCC-3.1.3

Protein Construction

A DNA sequence encoding the extracellular domain of human CA12 (NP_001209.1) (Met 1-Gln 291) was expressed with a C-terminal polyhistidine tag.

Organism

Human

Expression Host

Human Cells

QC Testing

Activity

Measured by its esterase activity. The specific activity is >40 pmoles/min/μg, as measured with 1 mM 4-Nitrophenyl acetate and 2.5 μg enzyme at 400 nm in 100 μL of 12.5 mM Tris, 75 mM NaCl, pH 7.5.

Purity

> 97 % 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 25

Molecular Mass

The recombinant human CA12 consisting of 278 amino acids and has a calculated molecular mass of 31.6 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 40-45 kDa protein 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

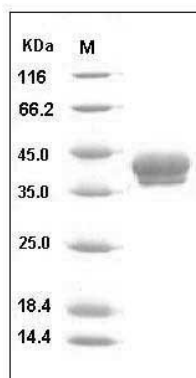
Storage

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 XII / CA12 Protein
(His Tag) SDS-PAGE