

Recombinant Human Carbonic Anhydrase 3 (C-6His)

Catalog No: CF26

Description Recombinant Human Carbonic Anhydrase 3 is produced by our E.coli expression system and the target

gene encoding Ala2-Lys260 is expressed with a 6His tag at the C-terminus.

Source E. coli

Alternative name Carbonic Anhydrase 3; Carbonate Dehydratase III; Carbonic Anhydrase III; CA-III; CA3

Accession No. AAH04897.1

Predicted Molecular Weight 30.6kDa

AP Molecular Weight

28-30kDa, reducing conditions.

Formulation Supplied as a 0.2 µm filtered solution of 25mM Tris-HCl, 150mM NaCl, pH 8.5.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Shipping The product is shipped on dry ice/polar packs.

Upon receipt, store it immediately at the temperature listed below.

Storage Store at < -20°C, stable for 6 months after receipt.

Please minimize freeze-thaw cycles.

Background

Carbonic Anhydrase 3 (CA3) belongs to the Alpha-Carbonic Anhydrase family that encodes carbonic anhydrase isozymes. These carbonic anhydrases are a class of metalloenzymes that catalyze the reversible hydration of carbon dioxide and are differentially expressed in a number of cell types. The expression of the CA3 gene is strictly tissue specific and it is present at high levels in skeletal muscle with much lower levels found in cardiac and smooth muscle. CA3 is activated by proton donors such as imidazole and the dipeptide histidylhistidine. CA3 is inhibited by coumarins and sulfonamide derivatives such as acetazolamide.

SDS-Page



