



Recombinant Protein Technical Manual
Recombinant Human Carbonic Anhydrase 7/CA7
Protein (His Tag)(Active)
RPES4302

Product Data:

Product SKU: RPES4302

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P43166

Protein Information:

Molecular Mass: 30.7 kDa

AP Molecular Mass: 31 kDa

Tag: C-6His

Bio-activity: Measured by its esterase activity The specific activity is 2862 pmol/min/ug .

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 8.0 .

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Carbonic Anhydrase 7; Carbonate Dehydratase VII; Carbonic Anhydrase VII; CA-VII; CA7; CAVII

Immunogen Information:

Sequence: Met 1-Ala264

Background:

Carbonic Anhydrase 7 (CA7) is a member of the alpha-carbonic anhydrase family. Alpha-carbonic anhydrase is a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. Furthermore, Alpha-carbonic anhydrase is associated with many biological processes, including calcification, respiration, bone resorption, acid-base balance and the formation of aqueous humor. CA7 is activated by histamine, L-adrenaline, L- and D-histidine, and L- and D-phenylalanine, but it is inhibited coumarins, sulfonamide derivatives such as acetazolamide (AZA) by saccharin and Foscarnet.