

Recombinant Protein Technical Manual

Recombinant Human Carbonic Anhydrase 13/CA13 Protein (His Tag)(Active) RPES4181

Product Data:

Product SKU: RPES4181 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: Q8N1Q1

Protein Information:

Molecular Mass: 30.5 kDa

AP Molecular Mass: 32 kDa

Tag: C-6His

Bio-activity: Measured by its esterase activity. The specific activity is 384.94 pmol/min/μg.

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

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ 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 7.5.

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

Application:

Synonyms: Carbonic Anhydrase 13; Carbonate Dehydratase XIII; Carbonic Anhydrase XIII; CA-

XIII; CA13

Immunogen Information:

Sequence: Met 1-His262

Background:

Carbonic Anhydrase 13 (CA13) belongs to the carbonic anhydrase family which can catalyzes the reversible hydration recation of carbon dioxide. Carbonic anhydrases participate in many biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. CA13 is a cytosolic enzyme and is widely expressed in human, such as thymus, small intestine, spleen, prostate, ovary, colon and testis, indicating that it may play a key role in several organs. CA13 is inhibited by acetazolamide.