



Recombinant Protein Technical Manual  
Recombinant Human Carbonic Anhydrase 14/CA14  
Protein (E. coli, His Tag)  
RPES4205

### Product Data:

**Product SKU:** RPES4205

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** Q9ULX7

### Protein Information:

**Molecular Mass:** 32.8 kDa

**AP Molecular Mass:** 40 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 85 % 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 Tris, 150mM NaCl, 10% Glycerol, pH 8.0.

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

**Application:**

**Synonyms:** Carbonic Anhydrase 14; Carbonate Dehydratase XIV; Carbonic Anhydrase XIV; CA-XIV; CA14; UNQ690/PRO1335

## Immunogen Information:

**Sequence:** Gly19-Met290

## Background:

Carbonic Anhydrase 14 (CA14) belongs to the Alpha-Carbonic Anhydrase family. It is highly expressed in all parts of the central nervous system and lowly expressed in adult liver, heart, small intestine, colon, kidney, urinary bladder, and skeletal muscle. CA14 along with other Carbonic Anhydrases (CAs) participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. CA14 is predicted to be a type I membrane protein and catalyzes the reversible hydration of carbon dioxide.