

Recombinant Protein Technical Manual

Recombinant Human Carbonic Anhydrase 10/CA10 Protein (Human Cells, His Tag) RPES4134

Product Data:

Product SKU: RPES4134 **Size:** 10μg

Species: Human Cells

Uniprot: Q9NS85

Protein Information:

Molecular Mass: 32.8 kDa

AP Molecular Mass: 34 kDa

Tag: C-6His

Bio-activity:

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

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from 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-Related Protein 10; Carbonic Anhydrase-Related Protein X;

CA-RP X; CARP X; Cerebral Protein 15; CA10;CA-RPX;CARPX;HUCEP5

Immunogen Information:

Sequence: Gln22-Asn300

Background:

Carbonic Anhydrase X (CA10) belongs to CA family of zinc metalloenzymes, which catalyze the reversible hydration of carbon dioxide in various biological processes such as respiration, renal tubular acidification and bone resorption. While CA10 is a secreted protein without Carbonic Anhydrase activity (i. e. , the reversible hydration of CO2) due to point mutations in the zinc binding site, it has esterase activity. The human and mouse CA10 are expressed in the brain, indicating that they may play a role in brain development.