

**Recombinant Protein Technical Manual** 

Recombinant Human Carbonic Anhydrase 10/CA10 Protein (E. coli, His Tag) RPES4157

Product Data:

Product SKU: RPES4157

Species: Human

**Size:** 10μg

Expression host: E. coli

Uniprot: Q9NS85

<b>Protein</b>	Inforn	nation
I I OLCIII		

Molecular Mass:	33.0 kDa
AP Molecular Mass:	31 kDa
Tag:	N-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ 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 $\mu m$ filtered solution of 25mM Tris, 150mM NaCl, pH 7.5.
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

## Sequence: Ala21-Asn300

## Background:

Carbonic Anhydrase-Related Protein 10 (CA10) protein belongs to the carbonic anhydrase family of zinc metalloenzymes. It is an acatalytic member of the alpha-carbonic anhydrase subgroup. CA10 expression is detected in the adult total brain and in almost all parts of the central nervous system, but it is not expressed in the fetal brain. CA10 catalyze the reversible hydration of carbon dioxide in various biological processes, which is fundamental to many processes such as respiration, renal tubular acidification and bone resorption. CA10 is thought to play a role in the central nervous system, especially in brain development.