

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

**Catalog Number: PKSH032158**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

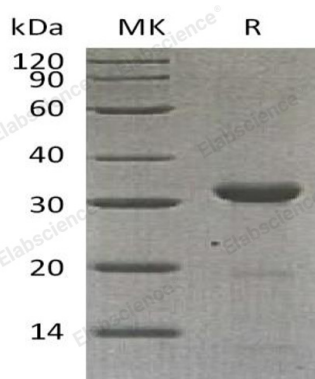
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human Carbonic Anhydrase 10;CA10 protein Ala21-Asn300, with an C-terminal His
<b>Calculated MW</b>	33.0 kDa
<b>Observed MW</b>	31 kDa
<b>Accession</b>	Q9NS85
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 25mM Tris-HCl, 150mM NaCl, pH 7.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual.

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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.

### For Research Use Only