

## Recombinant Human Carbonic Anhydrase 8/CA8 Protein (His Tag)

**Catalog Number:** PKSH032165

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

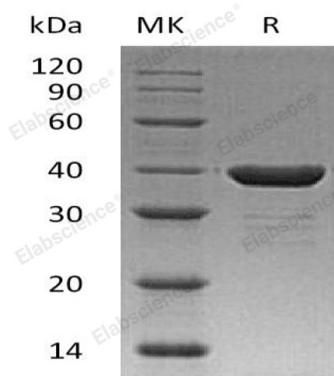
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human Carbonic Anhydrase 8;CA8 protein Ala2-Gln290, with an C-terminal His
<b>Calculated MW</b>	34.0 kDa
<b>Observed MW</b>	40 kDa
<b>Accession</b>	P35219
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Concentration</b>	Subject to label value.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	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.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 500mM NaCl, 1mM DTT, pH 8.5.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Carbonic Anhydrase 8 (CA8) belongs to the alpha-carbonic anhydrase family. Alpha-carbonic anhydrase is a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. Because CA8 has some sequence similarity with other known carbonic anhydrase genes, it was firstly called as CA-related protein. Nevertheless, CA8 does not have a carbonic anhydrase catalytic activity. Defects in CA8 are the cause of cerebellar ataxia mental retardation and dysequilibrium syndrome type 3 (CMARQ3), which is a congenital cerebellar ataxia associated with dysarthria, quadripedal gait and mild mental retardation.