

## Recombinant Human Carbonic Anhydrase 5B/CA5B Protein (His Tag)

**Catalog No.** PKSH032163

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

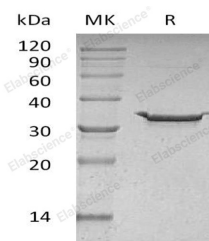
### Description

<b>Synonyms</b>	Carbonic Anhydrase 5B Mitochondrial;Carbonate Dehydratase VB;Carbonic Anhydrase VB;CA-VB;CA5B
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Cys34-Pro317
<b>Accession</b>	Q9Y2D0
<b>Calculated Molecular Weight</b>	33.8 kDa
<b>Observed molecular weight</b>	33 kDa
<b>Tag</b>	C-His
<b>Bioactivity</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>	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, 100mM NaCl, pH 8.0.
<b>Reconstitution</b>	Not Applicable

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Carbonic Anhydrase 5B (CA5B) is a member of alpha-carbonic anhydrase family (CAs) that catalyze the reversible hydration of carbon dioxide. CAs is associated with many biological processes; including calcification; respiration; bone resorption; acid-base balance and the formation of aqueous humor. CA5B is highly expressed in heart; pancreas; kidney; placenta; lung; and skeletal muscle; but it is restricted to the liver. CA5B is localized in the mitochondria and shows the highest sequence similarity to the other mitochondrial CA; CA-VA. CA5B is inhibited by coumarins; sulfonamide

### For Research Use Only

derivatives such as acetazolamide (AZA); saccharin; and Foscarnet.