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

Catalog Number: PKSH032163

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

#### Description

Species Human

**Source** E.coli-derived Human Carbonic Anhydrase 5B;CA5B protein Cys34-Pro317, with an C-

terminal His

 Mol\_Mass
 33.8 kDa

 Accession
 Q9Y2D0

**Bio-activity** Not validated for activity

## **Properties**

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

**Endotoxin** < 1.0 EU per  $\mu$ g of the protein as determined by the LAL method.

Storage Storage Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

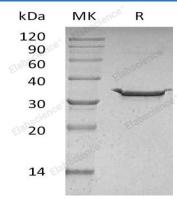
**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

packs. Upon receipt, store it immediately at < - 20°C.

**Formulation** Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 100mM NaCl, pH 8.0.

**Reconstitution** 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; kidne y; 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 derivatives such as acetazolamide (AZA); saccharin; and Foscarnet.