Recombinant Human Carbonic anhydrase 5B, mitochondrial (CA5B)

Product Code	CSB-BP896871HU
Abbreviation	CA5B
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9Y2D0
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	CSLYTCT YKTRNRALHP LWESVDLVPG GDRQSPINIR WRDSVYDPGL KPLTISYDPA TCLHVWNNGY SFLVEFEDST DKSVIKGGPL EHNYRLKQFH FHWGAIDAWG SEHTVDSKCF PAELHLVHWN AVRFENFEDA ALEENGLAVI GVFLKLGKHH KELQKLVDTL PSIKHKDALV EFGSFDPSCL MPTCPDYWTY SGSLTTPPLS ESVTWIIKKQ PVEVDHDQLE QFRTLLFTSE GEKEKRMVDN FRPLQPLMNR TVRSSFRHDY VLNVQAKPKP ATSQATP
Source	Baculovirus
Target Names	CA5B
Protein Names	Recommended name: Carbonic anhydrase 5B, mitochondrial EC= 4.2.1.1 Alternative name(s): Carbonate dehydratase VB Carbonic anhydrase VB Short name= CA-VB
Expression Region	34-317
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA VB is localized in the mitochondria and shows the highest sequence similarity to the other mitochondrial CA, CA VA. It has a wider tissue distribution than CA VA, which is restricted to the liver. The differences in tissue distribution suggest that the two mitochondrial carbonic anhydrases evolved to assume different physiologic roles.

Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.