Recombinant Human Carbonic anhydrase 4 (CA4)

Product Code	CSB-MP004372HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P22748
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	AE SHWCYEVQAE SSNYPCLVPV KWGGNCQKDR QSPINIVTTK AKVDKKLGRF FFSGYDKKQT WTVQNNGHSV MMLLENKASI SGGGLPAPYQ AKQLHLHWSD LPYKGSEHSL DGEHFAMEMH IVHEKEKGTS RNVKEAQDPE DEIAVLAFLV EAGTQVNEGF QPLVEALSNI PKPEMSTTMA ESSLLDLLPK EEKLRHYFRY LGSLTTPTCD EKVVWTVFRE PIQLHREQIL AFSQKLYYDK EQTVSMKDNV RPLQQLGQRT VIKS
Source	Mammalian cell
Target Names	CA4
Protein Names	Recommended name: Carbonic anhydrase 4 EC= 4.2.1.1 Alternative name(s): Carbonate dehydratase IV Carbonic anhydrase IV Short name= CA-IV
Expression Region	19-284
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. This gene encodes a glycosylphosphatidyl-inositol-anchored membrane isozyme expressed on the luminal surfaces of pulmonary (and certain other) capillaries and proximal renal tubules. Its exact function is not known; however, it may have a role in inherited renal abnormalities of bicarbonate transport.
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.