



# Recombinant Human Carbonic anhydrase 12 (CA12), partial

<b>Product Code</b>	CSB-EP004367HU-B
<b>Storage</b>	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.
<b>Uniprot No.</b>	O43570
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	APVNGSKWTYFGPDGENSWSKKYPSCGGLLQSPIDLHSDILQYDASLTPLFQ GYNLSANKQFLLTNNGHSVKNLPSDMHIQGLQSRYSATQLHLHWGNPNDPH GSEHTVSGQHFAAELHIVHYNSDLYPDASTASNKSEGLAVLAVLIEMGSFNPS YDKIFSHLQHVKYKGQEA FVPGFNIEELLPERTAEYYRYRGLSTTPPCNPTVL WTVFRNPVQISQEQLLALETALYCTHMDDPSPREMINNFRQVQKFDERLVYTS FSQVQVCTAAGLS
<b>Research Area</b>	Cancer
<b>Source</b>	E.coli
<b>Target Names</b>	CA12
<b>Protein Names</b>	Recommended name: Carbonic anhydrase 12 EC= 4.2.1.1 Alternative name(s): Carbonate dehydratase XII Carbonic anhydrase XII Short name= CA-XII Tumor antigen HOM-RCC-3.1.3
<b>Expression Region</b>	25-301aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4? for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Partial
<b>Target Details</b>	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. This gene product is a type I membrane protein that is highly expressed in normal tissues, such as kidney, colon and pancreas, and has been found to be overexpressed in 10% of clear cell renal carcinomas. Two transcript variants encoding different isoforms have been identified for this gene.
<b>Reconstitution</b>	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.

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