# Recombinant Human Carbonic Anhydrase 7/CA7 Protein (His Tag)

### Catalog No. PKSH030890

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

Description	
Synonyms	Carbonic Anhydrase 7;Carbonate Dehydratase VII;Carbonic Anhydrase VII;CA-VII;CA7;CAVII
Species	Human
Expression Host	E.coli
Sequence	Met 1-Ala 264
Accession	P43166
Calculated Molecular Weight	31.0 kDa
Observed molecular weight	33 kDa
Tag	C-His
Bioactivity	Measured by its esterase activity. The activity is > 20 pmoles/min/ $\mu$ g.
Properties	
Purity	> 96 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	



> 96 % as determined by reducing SDS-PAGE.

## Background

Carbonic anhydrase 7; also known as carbonate dehydratase VII; carbonic anhydrase VII; CA-VII and CA7; is a

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cytoplasm protein which belongs to thealpha-carbonic anhydrase family. Carbonic anhydrases 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. Carbonic anhydrases show extensive diversity in tissue distribution and in their subcellular localization. CA7 / CA-VII is predominantly expressed in the salivary glands. Alternative splicing in the coding region results in multiple transcript variants encoding different isoforms.

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