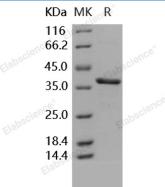
Recombinant Human Carbonic Anhydrase 8/CA8 Protein (His Tag)

Catalog Number: PKSH031586

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

Description	
Species	Human
Source	E.coli-derived Human Carbonic Anhydrase 8/CA8 protein Met 1-Gln 290, with an C-
	terminal His
Calculated MW	33.8 kDa
Observed MW	37 kDa
Accession	NP_004047.3
Bio-activity	Measured by its esterase activity. The specific activity is > 100 pmoles/min/µg.
Properties	
Purity	> 94 % 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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, 15% glycerol, pH 7.5
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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	



> 94 % as determined by reducing SDS-PAGE.

Background

The carbonic anhydrases (or carbonate dehydratases) are classified as metalloenzyme for its zinc ion prosthetic group and form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction that takes part in maintaining acid-base balance in blood and other tissues. The carbonic anhydrasekl (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. Carbonic anhydrase protein (CA) VIII, which is a member of the CA gene family, has been shown to have no catalytic CA activity and its biological function is still unknown. Increased expression of CA-RP VIII was observed in 78% of colorectal carcinomas. It suggested that CA-RP VIII plays a role in the process of invasion in colorectal cancer.

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