Recombinant Human Calcitonin/CALCA Protein (His Tag)

Catalog Number: PKSH032145

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

Description	
Species	Human
Source	HEK293 Cells-derived Human Calcitonin; CALCA protein Ala26-Asn141, with an C-
	terminal His
Calculated MW	13.8 kDa
Observed MW	16 kDa
Accession	P01258
Bio-activity	Not validated for activity
Properties	
Purity	>90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
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 a 0.2 μ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
	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



> 90 % as determined by reducing SDS-PAGE.

Background

Calcitonin is a secreted protein which belongs to the calcitonin family. Calcitonin is cleaved into the following two chains: Calcitonin and Katacalcin. Katacalcin is a potent plasma calcium-lowering peptide. Calcitonin is a 32-amino acid linear polypeptide hormone. Calcitonin acts to reduce blood calcium (Ca2+); opposing the effects of parathyroid hormone (PTH). Its importance in humans has not been as well established as its importance in other animals; as its function is usually not significant in the regulation of normal calcium homeostasis. Calcitonin causes a rapid but short-lived drop in the level of calcium and phosphate in blood by promoting the incorporation of those ions in the bones.