## Recombinant Human Stanniocalcin 1/STC-1 (C-6His)

## Catalog Number: PKSH033893

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

Description			
Species	Human		
Source	HEK293 Cells-derived Human Stanniocalcin 1;STC-1 protein Thr18-Ala247, with an		
	terminal His		
Calculated MW	26.9 kDa		
Observed MW	28-36 kDa		
Accession	P52823		
Bio-activity	Not validated for activity		
Properties			
Purity	> 95 % 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 -8		
	°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 µm filtered solution of PBS, 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

kDa	МК	R	
120 90 60			
40	-	-	
30	-	And a local division of	
20			
14	-		

> 95 % as determined by reducing SDS-PAGE.

## Background

Stanniocalcin 1 (STC-1) is a homodimeric glycoprotein hormone that is involved in calcium and phosphate homeostasis. It was originally identified in bony fishes, where elevation of calcium in serum causes the release of STC from the endocrine glands called the corpuscles of Stannius. STC-1 inhibits the breakdown of PAPP-A, protects cancer cells from apoptosis, reduces tumor size of liver cancers, promotes osteoblast differentiation and inhibits longitudinal bone growth directly at the growth plate. It is also a biomarker of brain and lung cancer progression. STC1 signals through inhibitory G-protein modulates CGRP receptor spatial localization during osteoblastogenesis and may function as a regulatory factor interacting with calcitonin peptide members during bone formation.

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