A Reliable Research Partner in Life Science and Medicine

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

Catalog Number: PKSH033893

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

$\mathbf{r}$							
H)	es	C	m	n	т	ſΠ	ï

Species Human

Source HEK293 Cells-derived Human Stanniocalcin 1;STC-1 protein Thr18-Ala247, with an C-

terminal His

Calculated MW26.9 kDaObserved MW28-36 kDaAccessionP52823

**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 -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 a 0.2 µm filtered solution of PBS, pH 7.4.

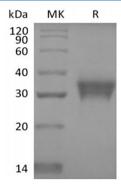
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

## Data



> 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.

### For Research Use Only