



# Recombinant Protein Technical Manual

## Recombinant Human Calcitonin/CALCA Protein (His Tag)

RPE3910

### Product Data:

**Product SKU:** RPE3910

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P01258

### Protein Information:

**Molecular Mass:** 13.8 kDa

**AP Molecular Mass:** 16 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 20mM TrisHCl, 150mM NaCl, pH 7.4.

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

**Application:**

**Synonyms:** Calcitonin; Katalcalcin; Calcitonin Carboxyl-Terminal Peptide; CCP; PDN-21; CALCA; CALC1

## Immunogen Information:

**Sequence:** Ala26-Asn141

## Background:

Calcitonin is a secreted protein which belongs to the calcitonin family. Calcitonin is cleaved into the following two chains: Calcitonin and Katalcalcin. Katalcalcin is a potent plasma calcium-lowering peptide. Calcitonin is a 32-amino acid linear polypeptide hormone. Calcitonin acts to reduce blood calcium ( $\text{Ca}^{2+}$ ), 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.