



Recombinant Protein Technical Manual

Recombinant Human Calcitonin/CALCA Protein (His Tag, E. coli)

RPES3932

Product Data:

Product SKU: RPES3932

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P01258

Protein Information:

Molecular Mass: 10.5 kDa

AP Molecular Mass: 16 kDa

Tag: C-6His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

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

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 50% Glycerol, 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: Tyr58-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 (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.