

Recombinant Rat Calcitonin/CT protein (His Tag)

Catalog Number: PDMR100092

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

Description

Species	Rat
Source	HEK293 Cells-derived Rat Calcitonin protein Met1-Asn136, with an C-terminal His
Calculated MW	14.9 kDa
Observed MW	20 kDa
Accession	P01257
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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 in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

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 (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.