

Recombinant Human Procalcitonin

Catalog Number: RP100-164

Accession Number: P01258

Specifications and Uses:

Alternate Names: PCT

Description:

Procalcitonin is a precursor of the peptide hormone called calcitonin. Procalcitonin is mainly produced by the C cells of the thyroid and certain endocrine cells of the lung. Under normal expression conditions, procalcitonin is immediately cleaved into three specific fragments, an N terminal residue, calcitonin and katalcalcin. Levels of unprocessed procalcitonin have been shown to rise significantly after bacterial infection, trauma or shock. Recombinant human Procalcitonin is a non-glycosylated protein, containing 116 amino acids, with a molecular weight of 12.8 kDa.

Source: *E.coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation and Stability:

Recombinant human Procalcitonin is lyophilized from 10 mM Na₂PO₄, pH 7.5. Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity (typically ≥ 97%) determined by:

Reducing and Non-reducing SDS-PAGE, HPLC

Endotoxin Level:

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

Biological Activity:

Activity is tested using Biomerieux reagents on the Min-Vidas at 80 ng/mL, with a typical recovery of 80%.

AA Sequence:

APFRSALESS PADPATLSED EARLLLAALV QDYVQMKASE LEQEQEREGRS SLDSPRSKRC GNLSTCMLGT
YTQDFNKFHT FPQTAIGVGA PGKKRDMSSD LERDHRPHVS MPQNAN

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!