

Procalcitonin Human

Description: Procalcitonin Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 116 amino acids and having a molecular mass of 12.7 kDa. The Procalcitonin is purified by standard chromatographic techniques.

Synonyms: Procalcitonin, PCT.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Amino Acid Sequence: APFRSALESS PADPATLSED EARLLLAALV QDYVQMKASE
LEQEQUEREGS SLDSPRSKRC GNLSTCMLGT YTQDFNKFHT FPQTAIGVGA PGKKRDMSSD
LERDHRPHVS MPQNAN.

Purity: Greater than 97.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Formulation:

Lyophilized from 10mM sodium phosphate pH-7.5.

Stability:

Lyophilized procalcitonin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution procalcitonin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

Solubility:

It is recommended to reconstitute the lyophilized procalcitonin sterile 18M-cm H₂O at 100 µg/ml, which can then be further diluted to other aqueous solutions.

Introduction:

Procalcitonin is a peptide hormone 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 katacalcine. Levels of unprocessed procalcitonin rise significantly after bacterial infection, trauma or shock.

Biological Activity:

Human Procalcitonin was tested using Biomerieux reagents on the Min-Vidas. The assay was run at 82 ng/ml with a recovery of 82 percent.

References:

Title: A sandwich assay for procalcitonin detection in POCT applications. Publication: Advanced Biomedical and Clinical Diagnostic Systems VII, edited by Anita Mahadevan-Jansen, Tuan Vo-Dinh, Warren S. Grundfest, Proc. of SPIE Vol. 7169, 716905

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