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Certificate of Analysis and Data Sheet

Salmon Calcitonin Acetate

Catalog No. 228-10162

Synonyms:

CT, KC, CGRP, CALC1, CGRP1, CGRP-I, MGC126648, katacalcin, Calcitonin gene-related peptide 1 precursor, Calcitonin gene-related peptide I.

Introduction:

Calcitonin (CT) is a peptide hormone produced by the parafollicular cells of the thyroid gland in mammals and by the ultimobranchial gland of birds and fish. Salmon calcitonin (sCT), which is more potent and longer lasting than human CT, has been used widely for the treatment of osteoporosis, paget's disease, hypercalcemic shock and chronic pain in terminal cancer patients. sCT is one of the many bioactive peptides that require C-terminal amidation for full biological activity.

Description:

Calcitonin Acetate (Salmon) is a synthetic polypeptide of 32 amino acids in the same linear sequencethat is found in clacitonin of salmon origin.

Calcitonin Acetate (Salmon) has an amino acid sequence of: Cys-Ser-Asn-Leu-Ser-Thr-Cys-Val-Leu-Gly-Lys-Leu-Ser-Gln-Glu-Leu-His-Lys-Leu-Gln-Thr-Tyr-Pro-Arg-Thr-Asn-Thr-Gly-Ser-Gly-Thr-Pro-NH2 and a Molecular Formula: of $C_{145}H_{240}N_{44}O_{48}S_2$ Its Molecular Weight: 3431.9 Dalton.

Formulation

Sterile Filtered White lyophilized (freeze-dried) powder. The calcitonin peptide was lyophilized with no additives.

Solubility

It is recommended to reconstitute the lyophilized Calcitonin in sterile $18M\Omega$ -cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilized Calcitonin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CGRP 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.**

Purity

Greater than 98.0% as determined by(a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.