



Product Data Sheet

Cat # RP-1491

Salmon Calcitonin Acetate

Size: 1 mg

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.

Source: Calcitonin Acetate (Salmon) is a synthetic polypeptide of 32 amino acids in the same linear sequence that is found in calcitonin 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 C₁₄₅H₂₄₀N₄₄O₄₈S₂ Its Molecular Weight: 3431.9 Dalton. The protein (1 mg/ml) was lyophilized with no additives.

Application and Suggested Dilution: It is recommended to reconstitute the lyophilized Calcitonin in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. Users must optimize concentration and conditions for each assay.

Storage and 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.** If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

Usage: This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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