



Product Information

Product ID C0149

CAS No. 47931-85-1

Chemical Name H-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

Synonym

Formula C₁₄₅H₂₄₀N₄₄O₄₈S₂

Formula Wt. 3431.85

Melting Point

Purity ≥98%

Solubility Soluble in 0.05M acetic acid and DMSO (10-20mg/mL).

Store Temp -20° C

Ship Temp Ambient

Description Calcitonin is an endogenous neuropeptide that exhibits pro-oncogenic, anti-osteoarthritic, and anti-resorptive activities. Calcitonin induces activation of NF-κB, upregulating expression and activity of fibronectin, MMP-1, MMP-2, and MMP-9 and increasing cell growth in osteosarcoma cells. When administered clinically, calcitonin increases serum NO and urinary CTX-II levels, improving medial femoral condyle osteoarthritis. Calcitonin also inhibits SDCP-induced apoptosis of osteoclasts and increases bone formation and volume.

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
(Disulfide bridge Cys1-Cys7)

Bulk quantities available upon request

Product ID	Size
C0149	0.5 mg
C0149	1 mg
C0149	2.5 mg

References Tsagaraki I, Phenekos C, Tsilibary E, et al. Calcitonin-induced NF-κB activation up-regulates fibronectin expression in MG63 osteosarcoma cells. *Anticancer Res.* 2013 Nov;33(11):4901-6. PMID: 24222127.

Armagan O, Serin DK, Calisir C, et al. Inhalation therapy of calcitonin relieves osteoarthritis of the knee. *J Korean Med Sci.* 2012 Nov;27(11):1405-10. PMID: 23166425.

Kuo YJ, Tsuang FY, Sun JS, et al. Calcitonin inhibits SDCP-induced osteoclast apoptosis and increases its efficacy in a rat model of osteoporosis. *PLoS One.* 2012;7(7):e40272. PMID: 22792258.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.