

## Calcitonin (salmon)

## Chemical Properties

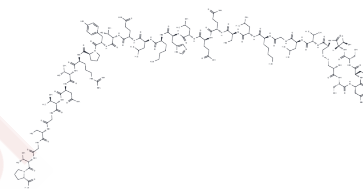
CAS No. : 47931-85-1

Formula: C145H240N44O48S2

Molecular Weight: 3431.85

Storage: Keep away from moisture, Store at low temperature  
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Calcitonin (salmon), a calcium regulating hormone, is used to treat osteoporosis in women who are at least 5 years past menopause.
Targets(IC50)	CGRP Receptor
In vivo	Oral Calcitonin salmon treatment significantly mitigates both fasting and postprandial hyperglycemia in a dose-dependent manner throughout the intervention. By the study's conclusion, this therapy notably reduces diabetic hyperglycemia by approximately 9 mM and lowers HbA1c levels by 1.7%. Additionally, it markedly diminishes glucose fluctuations during the oral glucose tolerance test, indicating improved glycemic control. The treatment also maintains elevated insulin levels while reducing excessive glucagon levels and glucagon-like peptide-1 secretion, primarily in the fasting state. Importantly, it enhances pancreatic beta-cell functionality and increases beta-cell mass, demonstrating its beneficial effects on pancreatic health and function[1].

## Solubility Information

Solubility	H2O: 50 mg/mL (14.57 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (0.58 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	0.2914 mL	1.4569 mL	2.9139 mL
5 mM	0.0583 mL	0.2914 mL	0.5828 mL
10 mM	0.0291 mL	0.1457 mL	0.2914 mL
50 mM	0.0058 mL	0.0291 mL	0.0583 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Feigh M, et al. Oral salmon calcitonin attenuates hyperglycaemia and preserves pancreatic beta-cell area and function in Zucker diabetic fatty rats. *Br J Pharmacol.* 2012 Sep;167(1):151-63.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481