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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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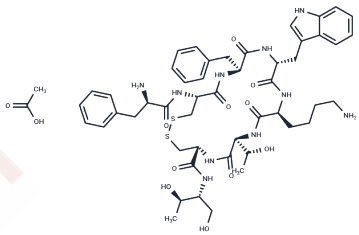
Data Sheet (Cat.No.T4119)

TargetMol

Octreotide Acetate

Chemical Properties



CAS No. : 79517-01-4

Formula: C51H70N10O12S2

Molecular Weight: 1079.3

Appearance: no data available

Storage: keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Octreotide Acetate (Sandostatin) is a potent, long-acting synthetic somatostatin octapeptide analog that inhibits secretion of growth hormone.
Targets(IC50)	Somatostatin
In vivo	Groups treated with Octreotide demonstrated a substantial reduction in tumor volume compared to those administered saline. The Octreotide-PPSG formulation (1.4 mg/kg, i.p.) exhibited a superior antitumor effect over the Octreotide-solution (100 μg/kg, i.p.). Furthermore, Octreotide treatments significantly suppressed the expression levels of SSTR2 and SSTR5 in rats with primary HCC, in comparison to the saline group, with Octreotide-PPSG achieving a more pronounced suppression than Octreotide-solution. In addition, a dose of octreotide acetate markedly lowered serum gastrin levels to about a third of the initial levels within 2 hours, maintaining this effect for around 6 hours. On the 21st day, a sustained-release form of octreotide acetate (5 mg intramuscular, every 4 weeks) was introduced.
Animal Research	Octreotide (acetate) is formulated in saline.MiceThirty mice with HCC xenografts are randomLy divided into three groups: (A) Octreotide-soln group, (B) Octreotide-PPSG group, and (C) control group. Octreotide-soln group receives i.p. injection of 100 μg/kg octreotide-soln once a day and totally for consecutive 14 days. Octreotide-PPSG group receives a single subcutaneous injection of 1.4 mg/kg Octreotide-PPSG, and the injection volume is about 0.2 mL. Control group receives i.p. injection of saline once a day for consecutive 14 days. Treatment starts on the next day after injection of H22 hepatoma cell suspension and maintains for 14 days. Tumor growth is monitored by periodic caliper measurements on day 7 and day 14 post seeding. Tumor volumes (V) are calculated based on the length and width of tumor by Eq. RatTwelve male SD rats are divided into two groups, and housed in standard cages at 25°C, with free access to food and water for a week prior to the experiment. Rats are subcutaneously injected with Octreotidereotide solution (Octreotide-soln) or Octreotide-PPSG at an equivalent single dose of 20 mg/kg. The dose is determined based on the clinical dose of Octreotide-soln in human. Rats are fasted for 12 h before dosing and food is returned approximately 2 h post dosing. Blood samples are collected at predetermined time points using heparinized Eppendorf tubes. Immediately after collection, the blood samples are placed on ice until centrifuged at 3000 g for 10 min within 1 h. The plasma is collected and stored at ?20°C until analysis.

Solubility Information

Solubility	DMSO: 29 mg/mL, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9265 mL	4.6326 mL	9.2653 mL
5 mM	0.1853 mL	0.9265 mL	1.8531 mL
10 mM	0.0927 mL	0.4633 mL	0.9265 mL
50 mM	0.0185 mL	0.0927 mL	0.1853 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.

Reference

Wang M, et al. Pharmacokinetic and pharmacodynamic study of a phospholipid-based phase separation gel for once a month administration of octreotide. J Control Release. 2016 May 28;230:45-56.