Product Data Sheet

Product Name: KBP-089
Cat. No.: GC79275

Chemical Properties

Cas. No.	1776112-67-4		
Formula	$C_{148}H_{242}N_{46}O_{48}S_3$	M.Wt	3529.98
Solubility	DMSO: 100 mg/mL (28.33 mM; Need ultrasonic)	Storage	Sealed storage, away from moisture
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

KBP-089 is a dual Amylin and Calcitonin Receptor agonist. KBP-089 reduces body weight, decreases adipose tissue mass and improves glucose tolerance in obese rats. KBP-089 also eliminates lipid accumulation in the liver and muscle, and ameliorates glycemic homeostasis and insulin sensitivity. KBP-089 is applicable to the research of diseases such as obesity and type 2 diabetes [1] [2].

In Vivo, KBP-089 (5 μg/kg; s.c.; once daily/once every other day; 15 days) produces comparable

body weight reduction effects in high-fat diet-fed rats[1]. KBP-089 (0.625-40 μg/kg; s.c.; 6 weeks) reduces body weight and improves glucose tolerance in high-fat diet-fed rats following 4-fold dose escalation administration[1]. KBP-089 (0.625-40 μg/kg; s.c.; single dose) dose-dependently suppresses caloric intake in overnight-fasted high-fat diet-fed rats within 48 h[1]. KBP-089 (5-20 μg/kg; s.c.; 8 weeks total) reduces blood glucose levels, improves glucose tolerance and enhances insulin action in diabetic obese rats[2]. KBP-089 (2.5 μg/kg; s.c.; 7 days) reduces total caloric intake in rats fed a normal diet and shifts their food preference from chocolate to standard chow[2].

In Vitro, KBP-089 (3 h) potently activates human CTR and AMY3-R in heterologous cell lines with its pEC50 values ranging from 8.7 to 9.9, and can induce sustained receptor activation for up to 72 hours[1].

References:
[1]. Gydesen S, et al. Optimization of tolerability and efficacy of the novel dual amylin and calcitonin receptor agonist KBP-089 through dose escalation and combination with a GLP-1 analog. Am J Physiol Endocrinol Metab. 2017 Nov 1;313(5):E598-E607.
[2]. Gydesen S, et al. A novel dual amylin and calcitonin receptor agonist, KBP-089, induces weight loss through a reduction in fat, but not lean mass, while improving food preference. Br J Pharmacol. 2017 Apr;174(7):591-602.