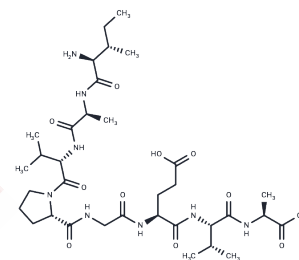


SGP8

Chemical Properties

CAS No. : 855790-98-6
 Formula: C₃₄H₅₈N₈O₁₁
 Molecular Weight: 754.87
 Storage: 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	SGP8 is a dye molecule that can be used in life science related research. The CAS number of SGP8 is 855790-98-6.
Targets(IC50)	Proteasome
In vitro	SGP8 (0, 100, and 500 μ M; 24 h) modulates lipid metabolism, inflammation, and fibrosis [1]. It notably increases serum GLP-1 levels and exhibits inhibitory activity against DPP4 [1]. In L02 cells, Real-Time qPCR revealed that 24-hour incubation with SGP8 at concentrations of 0, 100, and 500 μ M enhances the mRNA expression of lipid metabolism-related genes such as Cd36, Scd1, Cpt1, and Ppara α while significantly decreasing the expression of inflammatory genes including Tnfa, Il-1 β , and Ccl5. Western blot analysis demonstrated a decrease in the expression of lipid metabolism genes CD36, FAS, and SREBP-1 compared to a 1 mM PO model group. In LX2 cells, immunofluorescence analysis showed a significant reduction in the expression of TGF β 1-induced α -SMA and Collagen I proteins following a 24-hour incubation with 500 μ M SGP8.
In vivo	SGP8, administered at 15 mg/kg once daily via intraperitoneal injection for four weeks, alleviates steatohepatitis in mice on an MCD diet. Additionally, SGP8 at the same dosage over eight weeks mitigates liver damage and metabolic disorders in mice on an HFD. Tested on healthy 7-week-old male C57BL/6J mice (22 and 27 g), and dosed at 15 mg/kg daily for four weeks via intragastric administration, SGP8 did not reverse weight loss due to the MCD diet but reduced liver-to-body weight ratio, liver triglyceride and cholesterol content, serum ALT and AST activities, and improved liver fibrosis in MCD diet-induced NASH mice.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3247 mL	6.6237 mL	13.2473 mL
5 mM	0.2649 mL	1.3247 mL	2.6495 mL
10 mM	0.1325 mL	0.6624 mL	1.3247 mL
50 mM	0.0265 mL	0.1325 mL	0.2649 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

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