

GPR120 Agonist 3

Chemical Properties

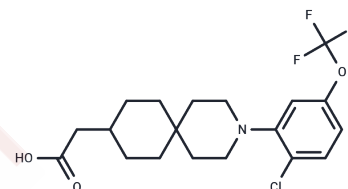
CAS No. : 1599477-75-4

Formula: C₁₉H₂₃ClF₃NO₃

Molecular Weight: 405.84

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	GPR120 Agonist 3 (GPR120-IN-1) is a selective agonist of Gpr120 (logEC ₅₀ : -7.62).
Targets(IC ₅₀)	GPCR
In vitro	GPR120-IN-1 causes a concentration-dependent response to recruiting β-arrestin-2 in both human and mouse Gpr120 expressing cells(EC ₅₀ s: ~0.35 μM). GPR120-IN-1 produces concentration-dependent increases in IP ₃ production from both human and mouse Gpr120 expressing cells. GPR120-IN-1 strongly and comparably inhibits LPS-induced phosphorylation of Ikkβ, Tak1, and Jnk and blocked IκB degradation.
In vivo	GPR120-IN-1 treatment has beneficial effects on hepatic lipid metabolism. It causes decreased liver triglycerides, decreased hepatic steatosis, and DAGs, as well as decreased saturated free fatty acid content. GPR120-IN-1 causes improved insulin sensitivity with increased glucose infusion rates. It also enhanced the insulin stimulated-glucose disposal rate. Only in WT mice, along with a marked increase in the ability of insulin to suppress hepatic glucose production.

Solubility Information

Solubility	DMSO: 50 mg/mL (123.2 mM),Sonication is recommended. H ₂ O: < 0.1 mg/mL (insoluble),Sonication and heating to 60°C are 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 (4.93 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	2.464 mL	12.3201 mL	24.6403 mL
5 mM	0.4928 mL	2.464 mL	4.9281 mL
10 mM	0.2464 mL	1.232 mL	2.464 mL
50 mM	0.0493 mL	0.2464 mL	0.4928 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

Oh DY, et al. A Gpr120-selective agonist improves insulin resistance and chronic inflammation in obese mice. Nat Med. 2014 Aug;20(8):942-7.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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