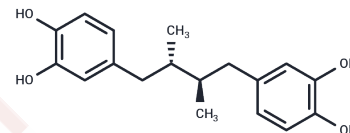


Masoprocol

Chemical Properties

CAS No. :	27686-84-6
Formula:	C ₁₈ H ₂₂ O ₄
Molecular Weight:	302.37
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	Masoprocol (meso-Nordihydroguaiaretic acid) is a potent, orally active lipoxygenase inhibitor that exhibits antihyperglycemic activity, making it potentially valuable for type II diabetes research. In vivo, Masoprocol reduces glucose and hepatic triglyceride concentrations [1] [2] [3].
Targets(IC50)	Lipoxygenase
In vitro	Masoprocol (30 μM; 90 min) treatment of adipocytes showed elevated basal and insulin-stimulated glucose clearance in adipocytes [2].
In vivo	METHODS: Masoprocol (10-80 mg/kg, orally, twice daily for 4-8 days) was administered to rats fed fructose to determine whether Masoprocol could also reduce TG concentrations in rats with fructose-induced hypertriglyceridemia (HTG). RESULTS: Masoprocol administration to rats with fructose-induced HTG resulted in a decrease in serum TG levels, a decrease in hepatic TG secretion, and an increase in peripheral TG clearance. [3]

Solubility Information

Solubility	DMSO: 80 mg/mL (264.58 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: 3.3 mg/mL (10.91 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	3.3072 mL	16.536 mL	33.0721 mL
5 mM	0.6614 mL	3.3072 mL	6.6144 mL
10 mM	0.3307 mL	1.6536 mL	3.3072 mL
50 mM	0.0661 mL	0.3307 mL	0.6614 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

Luo J, et al. Masoprocol (nordihydroguaiaretic acid): a new antihyperglycemic agent isolated from the creosote bush (*Larrea tridentata*). *Eur J Pharmacol.* 1998 Apr 3;346(1):77-9.

Reed MJ, et al. Effect of masoprocol on carbohydrate and lipid metabolism in a rat model of Type II diabetes. *Diabetologia.* 1999 Jan;42(1):102-6.

Scribner KA, et al. Masoprocol decreases serum triglyceride concentrations in rats with fructose-induced hypertriglyceridemia. *Metabolism.* 2000 Sep;49(9):1106-10.

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