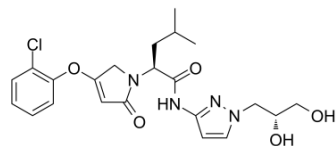


Dorzagliatin

Cat. No.:	HY-109030		
CAS No.:	1191995-00-2		
Molecular Formula:	C ₂₂ H ₂₇ ClN ₄ O ₅		
Molecular Weight:	462.93		
Target:	Glucokinase		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (270.02 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
	Preparing Stock Solutions	1 mM	2.1602 mL	10.8008 mL
	5 mM	0.4320 mL	2.1602 mL	
	10 mM	0.2160 mL	1.0801 mL	2.1602 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.49 mM); Clear solution			
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.49 mM); Clear solution			
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.49 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	Dorzagliatin (HMS5552), a dual-acting glucokinase (GK) activator, improves glycaemic control and pancreatic β-cell function in type 2 diabetes ^[1] .
IC ₅₀ & Target	Glucokinase ^[1]
In Vivo	Dorzagliatin (low-dose 10 mg/kg, and high-dose 30 mg/kg; administered intragastrically; daily 8:00 AM for one month) exerts a glucose-lowering effect on the glucose levels in diabetic rats ^[2] .

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague-Dawley (SD) rats (aged approximately 6–8 weeks and weighing 200-230 g) ^[2]
Dosage:	Low-dose (10 mg/kg), and high-dose (30 mg/kg)
Administration:	Administered intragastrically (i.g.); daily (8:00 AM) for one month
Result:	Exerted a glucose-lowering effect on the glucose levels.

REFERENCES

- [1]. Zhu XX, et al. Dorzagliatin (HMS5552), a novel dual-acting glucokinase activator, improves glycaemic control and pancreatic β -cell function in patients with type 2 diabetes: A 28-day treatment study using biomarker-guided patient selection. *Diabetes Obes Metab.* 2018 Sep;20(9):2113-2120.
- [2]. Wang P, et al. Effects of a Novel Glucokinase Activator, HMS5552, on Glucose Metabolism in a Rat Model of Type 2 Diabetes Mellitus. *J Diabetes Res.* 2017;2017:5812607.

Caution: Product has not been fully validated for medical applications. For research use only.

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