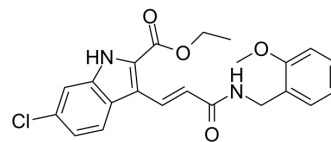


15-LOX-1 inhibitor 1

Cat. No.:	HY-138989		
CAS No.:	2349374-37-2		
Molecular Formula:	C ₂₂ H ₂₁ ClN ₂ O ₄		
Molecular Weight:	412.87		
Target:	Lipoxygenase		
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 : 10 mg/mL (24.22 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.4221 mL	12.1103 mL	24.2207 mL
		5 mM	0.4844 mL	2.4221 mL	4.8441 mL
10 mM		0.2422 mL	1.2110 mL	2.4221 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1 mg/mL (2.42 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	15-LOX-1 inhibitor 1 is a potent inhibitor of 15-LOX-1 (15-lipoxygenase-1) with an IC ₅₀ value of 0.19 μM. 15-LOX-1 inhibitor 1 protects macrophages from lipopolysaccharide-induced cytotoxicity. 15-LOX-1 inhibitor 1 inhibits NO formation and lipid peroxidation ^[1] .
IC₅₀ & Target	15-LOX-1 0.19 μM (IC ₅₀)
In Vitro	15-LOX-1 inhibitor 1 (Compound 9c) (0-5 μM; 24 hours) protects RAW 264.7 macrophages from LPS-induced cell death and shows stronger, dose-dependent effects with a 20% viability increase at 5 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay ^[1]

Cell Line:	RAW 264.7 macrophages
Concentration:	0, 0.2, 1, 5 μ M 15-LOX-1 inhibitor 1 and lipopolysaccharides (LPS) (100 μ g/mL)
Incubation Time:	24 hours
Result:	Showed stronger, dose-dependent effects with a 20% viability increase at 5 μ M.

REFERENCES

[1]. Guo H, et al. Novel 15-Lipoxygenase-1 Inhibitor Protects Macrophages from Lipopolysaccharide-Induced Cytotoxicity. J Med Chem. 2019;62(9):4624-4637.

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

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