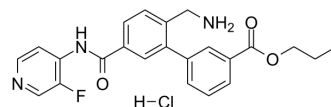


Sovesudil hydrochloride

Cat. No.:	HY-109191A
Molecular Formula:	C ₂₃ H ₂₃ ClFN ₃ O ₃
Molecular Weight:	443.9
Target:	ROCK
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton; Stem Cell/Wnt; TGF-beta/Smad
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 62.5 mg/mL (140.80 mM); ultrasonic and warming and heat to 60°C				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	2.2528 mL	11.2638 mL	22.5276 mL
		5 mM	0.4506 mL	2.2528 mL	4.5055 mL
	10 mM	0.2253 mL	1.1264 mL	2.2528 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.69 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Sovesudil (PHP-201) hydrochloride is a potent, ATP-competitive, locally acting Rho kinase (ROCK) inhibitor with IC ₅₀ s of 3.7 and 2.3 nM for ROCK-I and ROCK-II, respectively. Sovesudil hydrochloride lowers intraocular pressure (IOP) without inducing hyperemia ^{[1][2]} .	
IC ₅₀ & Target	ROCK-I 3.7 nM (IC ₅₀)	ROCK-II 2.3 nM (IC ₅₀)
In Vitro	Sovesudil (PHP-201) (1 μM; 60 min) hydrochloride is able to induce altered cellular behavior of human trabecular meshwork (HTM) cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Sovesudil (0.1%, 0.3%, and 0.5%; male New Zealand White rabbits) hydrochloride effectively reduces Intraocular Pressure (IOP) in ocular normotensive and acute hypertensive rabbits without causing distinct hyperemia ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. Van de Velde S, et al. AMA0076, a novel, locally acting Rho kinase inhibitor, potently lowers intraocular pressure in New Zealand white rabbits with minimal hyperemia. Invest Ophthalmol Vis Sci. 2014;55(2):1006-1016. Published 2014 Feb 18.

[2]. Ha A, et al. Sovesudil (locally acting rho kinase inhibitor) for the treatment of normal-tension glaucoma: the randomized phase II study [published online ahead of print, 2021 Jul 28]. Acta Ophthalmol. 2021;10.1111/aos.14949.

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

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