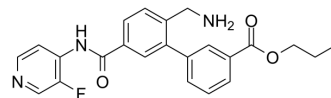


## Sovesudil

<b>Cat. No.:</b>	HY-109191		
<b>CAS No.:</b>	1333400-14-8		
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>22</sub> FN <sub>3</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	407.44		
<b>Target:</b>	ROCK		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Cytoskeleton; Stem Cell/Wnt; TGF-beta/Smad		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (245.43 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.4543 mL	12.2717 mL	24.5435 mL
		5 mM	0.4909 mL	2.4543 mL	4.9087 mL
10 mM		0.2454 mL	1.2272 mL	2.4543 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (6.14 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.14 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (6.14 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Sovesudil (PHP-201) is a potent, ATP-competitive, locally acting Rho kinase (ROCK) inhibitor with IC <sub>50</sub> s of 3.7 and 2.3 nM for ROCK-I and ROCK-II, respectively. Sovesudil lowers intraocular pressure (IOP) without inducing hyperemia <sup>[1][2]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	ROCK-I 3.7 nM (IC <sub>50</sub> )	ROCK-II 2.3 nM (IC <sub>50</sub> )
<b>In Vitro</b>	Sovesudil (PHP-201) (1 μM; 60 min) is able to induce altered cellular behavior of human trabecular meshwork (HTM) cells <sup>[1]</sup> .	

---

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) effectively reduces Intraocular Pressure (IOP) in ocular normotensive and acute hypertensive rabbits without causing distinct hyperemia<sup>[1]</sup>.

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.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA