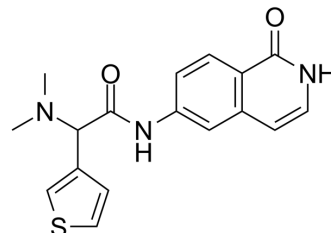


Verosudil

Cat. No.:	HY-16758		
CAS No.:	1414854-42-4		
Molecular Formula:	C ₁₇ H ₁₇ N ₃ O ₂ S		
Molecular Weight:	327.4		
Target:	ROCK		
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton; Stem Cell/Wnt; TGF-beta/Smad		
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 : 16.67 mg/mL (50.92 mM; ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.0544 mL	15.2718 mL	30.5437 mL
		5 mM	0.6109 mL	3.0544 mL	6.1087 mL
10 mM		0.3054 mL	1.5272 mL	3.0544 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.67 mg/mL (5.10 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.67 mg/mL (5.10 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.67 mg/mL (5.10 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Verosudil (AR-12286) is a potent, selective Rho-kinase (ROCK) inhibitor with K _i s of 2 and 2 nM for ROCK1 and ROCK2, respectively. AR-12286 lowers intraocular pressure (IOP) primarily by increasing aqueous humour outflow through the trabecular meshwork ^{[1][2]} .			
IC₅₀ & Target	ROCK1 2 nM (Ki)	ROCK2 2 nM (Ki)	PKA 69 nM (Ki)	MRCKA 28 nM (Ki)
	CAM2A	PKC theta		

	5855 nM (Ki)	9322 nM (Ki)
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REFERENCES

- [1]. Lin CW, Sherman B, Moore LA, et al. Discovery and Preclinical Development of Netarsudil, a Novel Ocular Hypotensive Agent for the Treatment of Glaucoma. *J Ocul Pharmacol Ther.* 2018;34(1-2):40-51.
- [2]. Kocczynski C, Novack GD, Swearingen D, van Haarlem T. Ocular hypotensive efficacy, safety and systemic absorption of AR-12286 ophthalmic solution in normal volunteers. *Br J Ophthalmol.* 2013;97(5):567-572.
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Caution: Product has not been fully validated for medical applications. For research use only.

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