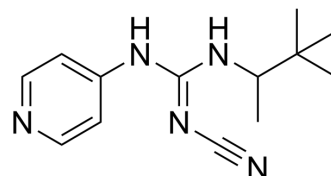


## Pinacidil

<b>Cat. No.:</b>	HY-14290		
<b>CAS No.:</b>	60560-33-0		
<b>Molecular Formula:</b>	C <sub>13</sub> H <sub>19</sub> N <sub>5</sub>		
<b>Molecular Weight:</b>	245.32		
<b>Target:</b>	Potassium Channel		
<b>Pathway:</b>	Membrane Transporter/Ion Channel		
<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 (407.63 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
<b>Preparing Stock Solutions</b>	<b>1 mM</b>	4.0763 mL	20.3815 mL	40.7631 mL
	<b>5 mM</b>	0.8153 mL	4.0763 mL	8.1526 mL
	<b>10 mM</b>	0.4076 mL	2.0382 mL	4.0763 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 (10.19 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 (10.19 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (10.19 mM); Clear solution</li> </ol>			

### BIOLOGICAL ACTIVITY

<b>Description</b>	Pinacidil is a potent activator of potassium channel. Pinacidil is an antihypertensive agent which hyperpolarises vascular smooth muscle by opening K <sup>+</sup> -channels. Pinacidil significantly improves the reperfusion function and cardiac compliance. Pinacidil has direct cardioprotective efficacy <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	potassium channel <sup>[1]</sup>

---

## CUSTOMER VALIDATION

- Bone Res. 2022 Mar 8;10(1):25.
- Dev Cell. 2022 May 11;S1534-5807(22)00287-8.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

---

## REFERENCES

- [1]. Grover GJ, et al. Anti-ischemic effects of the potassium channel activators pinacidil and cromakalim and the reversal of these effects with the potassium channel blocker glyburide. J Pharmacol Exp Ther. 1989;251(1):98-104.
- [2]. Hamilton TC, et al. Cromakalim, nicorandil and pinacidil: novel drugs which open potassium channels in smooth muscle. Gen Pharmacol. 1989;20(1):1-9.
- 

**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](mailto:tech@MedChemExpress.com)

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