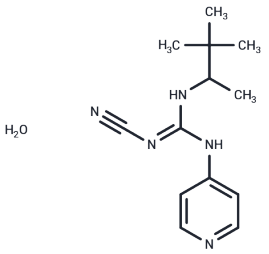
# Data Sheet (Cat.No.T12478)

TargetMol

## Pinacidil monohydrate

### Chemical Properties



CAS No. : 85371-64-8

Formula: C13H21N5O

Molecular Weight: 263.34

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | Pinacidil monohydrate is a potassium channel activator, antihypertensive drug. |
| Targets(IC50) | Potassium Channel |
| In vitro | Pinacidil hydrate activates the ATP-modulated potassium channels of guinea pog bladder and heart with Ki values of 104 and 251 nM, respectively[3]. |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 260 mg/mL (987.32 mM),Sonication is recommended.<br>Ethanol: 47 mg/mL (178.48 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (7.59 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.7974 mL | 18.9869 mL | 37.9737 mL |
| 5 mM | 0.7595 mL | 3.7974 mL | 7.5947 mL |
| 10 mM | 0.3797 mL | 1.8987 mL | 3.7974 mL |
| 50 mM | 0.0759 mL | 0.3797 mL | 0.7595 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Gollasch M, et al. Pinacidil relaxes porcine and human coronary arteries by activating ATP-dependent potassium channels in smooth muscle cells. J Pharmacol Exp Ther. 1995 Nov;275(2):681-92.
Buckle DR, et al. Relaxant effects of the potassium channel activators BRL 38227 and pinacidil on guinea-pig and human airway smooth muscle, and blockade of their effects by glibenclamide and BRL 31660. Pulm Pharmacol. 1993 Mar;6(1):77-86.
Bareggi SR, et al. Pharmacodynamics and pharmacokinetics of pinacidil in normotensive volunteers after repeated doses of a new slow-release tablet formulation. Arzneimittelforschung. 1999 Jan;49(1):21-5.