## 2,4-PDCA

MedChemExpress

Cat. No.:	HY-W01713	2		
CAS No.:	499-80-9			
Molecular Formula:	$C_7H_5NO_4$			
Molecular Weight:	167.12			
Target:	Histone Demethylase			
Pathway:	Epigenetics	5		
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 : 100 mg/mL (598.37 mM; Need ultrasonic)							
Preparing Stock Solutions	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg			
		1 mM	5.9837 mL	29.9186 mL	59.8372 mL			
	5 mM	1.1967 mL	5.9837 mL	11.9674 mL				
		10 mM	0.5984 mL	2.9919 mL	5.9837 mL			
	Please refer to the so	Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (14.96 mM); Clear solution							
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (14.96 mM); Clear solution							
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (14.96 mM); Clear solution							

<b>BIOLOGICAL ACTIV</b>	ТТҮ
Description	2,4-PDCA (2,4 pyridine dicarboxylic acid) is a broad-spectrum inhibitor of 20G oxygenase, including JmjC domain-containing
	family of histone demethylases (JHDMs). 2,4-PDCA is a target chemical in the field of bio-based plastics <sup>[1][2][3]</sup> .

## REFERENCES

[1]. Brewitz L, et al. Fluorinated derivatives of pyridine-2,4-dicarboxylate are potent inhibitors of human 2-oxoglutarate dependent oxygenases. J Fluor Chem. 2021

# Product Data Sheet

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#### Jul;247:109804.

[2]. Gómez-Álvarez H, et al. Bioconversion of lignin-derived aromatics into the building block pyridine 2,4-dicarboxylic acid by engineering recombinant Pseudomonas putida strains. Bioresour Technol. 2022 Feb;346:126638.

[3]. Brewitz L, et al. Fluorinated derivatives of pyridine-2,4-dicarboxylate are potent inhibitors of human 2-oxoglutarate dependent oxygenases. J Fluor Chem. 2021 Jul;247:109804.

### 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