

N-Hydroxypipelicolic acid potassium

Chemical Properties

CAS No. : 2253632-01-6

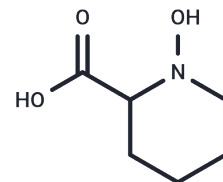
Formula: C₆H₁₀KNO₃

Molecular Weight: 183.25

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.

K



Biological Description

Description	N-Hydroxypipelicolic acid potassium is a metabolite of plant and a systemic acquired resistance (SAR) regulator.
Targets(IC50)	Others,Antibacterial
In vitro	N-Hydroxypipelicolic acid potassium plays a crucial role in systemic acquired resistance (SAR) by directly inducing SAR gene expression, amplifying signals, priming for enhanced defense activation, and interacting positively with salicylic acid signaling to boost plant immunity. Flavin-dependent monooxygenase1 (FMO1) acts downstream of Pip, hydroxylating it to produce N-Hydroxypipelicolic acid potassium[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.457 mL	27.2851 mL	54.5703 mL
5 mM	1.0914 mL	5.457 mL	10.9141 mL
10 mM	0.5457 mL	2.7285 mL	5.457 mL
50 mM	0.1091 mL	0.5457 mL	1.0914 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

Hartmann M, et al. N-hydroxypipelicolic acid and salicylic acid: a metabolic duo for systemic acquired resistance. *Curr Opin Plant Biol.* 2019 Aug;50:44-57.

Ádám AL, et al. Signals of Systemic Immunity in Plants: Progress and Open Questions. *Int J Mol Sci.* 2018 Apr 10;19(4). pii: E1146.

Shan L, et al. Pipped at the Post: Pipecolic Acid Derivative Identified as SAR Regulator. *Cell.* 2018 Apr 5;173(2):286-287.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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