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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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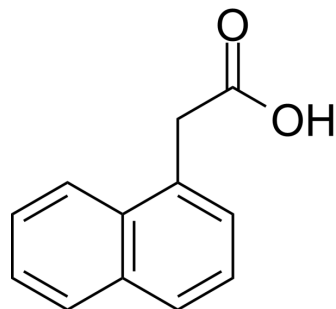
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1-Naphthaleneacetic acid

Cat. No.:	HY-18570		
CAS No.:	86-87-3		
Molecular Formula:	C ₁₂ H ₁₀ O ₂		
Molecular Weight:	186.21		
Target:	Phospholipase		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

Methanol : 125 mg/mL (671.29 mM; Need ultrasonic)
 DMSO : ≥ 100 mg/mL (537.03 mM)
 H₂O : < 0.1 mg/mL (insoluble)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	5.3703 mL	26.8514 mL	53.7028 mL
	5 mM	1.0741 mL	5.3703 mL	10.7406 mL
	10 mM	0.5370 mL	2.6851 mL	5.3703 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (13.43 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (13.43 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (13.43 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

1-Naphthaleneacetic acid (1-Naphthylacetic acid), a auxin, can promote plant growth. 1-Naphthaleneacetic acid is also an inhibitor of PLA₂, with an IC₅₀ of 13.16 μM^{[1][2]}.

IC₅₀ & Target

PLA₂

	13.16 μM (IC_{50})
In Vitro	1-Naphthaleneacetic acid (0.7-14 μM) inhibits the activity of PLA_2 , with the K_i and IC_{50} of 6.87 μM and 13.16 μM , respectively [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Gómez DA, et al. Effect of 1-naphthaleneacetic acid on organic acid exudation by the roots of white lupin plants grown under phosphorus-deficient conditions. J Plant Physiol. 2014 Sep 15;171(15):1354-61.

[2]. Dileep KV, et, al. Crystal structure of phospholipase A 2 in complex with 1-naphthaleneacetic acid. IUBMB Life. 2018 Oct;70(10):995-1001.

Caution: Product has not been fully validated for medical applications. For research use only.

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