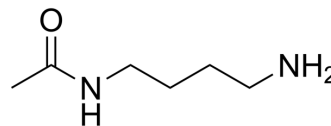


N-Acetylputrescine

Cat. No.:	HY-W342604
CAS No.:	5699-41-2
Molecular Formula:	C ₆ H ₁₄ N ₂ O
Molecular Weight:	130.19
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (768.11 mM; Need ultrasonic)
H₂O : 100 mg/mL (768.11 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	7.6811 mL	38.4054 mL	76.8108 mL
	5 mM	1.5362 mL	7.6811 mL	15.3622 mL
	10 mM	0.7681 mL	3.8405 mL	7.6811 mL

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

BIOLOGICAL ACTIVITY

Description

N-Acetylputrescine (NAP) is an endogenous metabolite widely present in animals and plants. N-Acetylputrescine can be used as a biomarker for lung squamous cell carcinoma (SCCL) and Parkinson's disease (PD) for disease diagnosis^{[1][2][3]}.

In Vitro

N-Acetylputrescine forms in human lymphocytes in the presence of [¹⁴C] putrescine^[4].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Liu R, et al. Plasma N-acetylputrescine, cadaverine and 1,3-diaminopropane: potential biomarkers of lung cancer used to evaluate the efficacy of anticancer drugs. *Oncotarget*. 2017 Jul 17;8(51):88575-88585.
- [2]. Pfanzagl B, et al. N-acetylputrescine as a characteristic constituent of cyanelle peptidoglycan in glaucocystophyte algae. *J Bacteriol*. 1996 Dec;178(23):6994-7.
- [3]. Peng KW, et al. Identification and Validation of N-Acetylputrescine in Combination With Non-Canonical Clinical Features As a Parkinson's Disease Biomarker Panel[J]. *bioRxiv*, 2021: 2021.07. 23.453542.

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

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