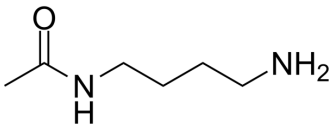
N-Acetylputrescine

Cat. No.:	HY-W342604
CAS No.:	5699-41-2
Molecular Formula:	$C_6H_{14}N_2O$
Molecular Weight:	130
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 (769.23 mM; Need ultrasonic)

H_2O : 100 mg/mL (769.23 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	7.6923 mL	38.4615 mL	76.9231 mL
5 mM	1.5385 mL	7.6923 mL	15.3846 mL
10 mM	0.7692 mL	3.8462 mL	7.6923 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 [^{14}C] 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 K W, 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.

[4]. Menashe M, et al. Formulation of N-acetylputrescine and N1-acetylspermidine in cultured human lymphocytes. Biochem J. 1980 Apr 15;188(1):263-7.

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