

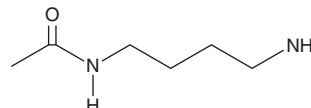
PRODUCT INFORMATION



N¹-Acetylputrescine

Item No. 37185

CAS Registry No.: 5699-41-2
Formal Name: N-(4-aminobutyl)-acetamide
Synonyms: Monoacetylputrescine, N-acetyl Putrescine
MF: C₆H₁₄N₂O
FW: 130.2
Purity: ≥95%
Supplied as: A neat liquid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

N¹-Acetylputrescine is supplied as a neat liquid. A stock solution may be made by dissolving the N¹-acetylputrescine in the solvent of choice, which should be purged with an inert gas. N¹-Acetylputrescine is soluble in organic solvents such as ethanol and DMSO. The solubility of N¹-acetylputrescine in these solvents is approximately 16 and 10 mg/ml, respectively. N¹-Acetylputrescine is also slightly soluble in dimethyl formamide.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of N¹-acetylputrescine can be prepared by directly dissolving the neat liquid in aqueous buffers. The solubility of N¹-acetylputrescine in PBS (pH 7.2) is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N¹-Acetylputrescine is a metabolite of the endogenous polyamine putrescine.¹ It is formed from putrescine by diamine acetyltransferase 1 in the brain. Serum levels of N¹-acetylputrescine are increased in patients with breast cancer.²

References

1. Seiler, N. and Al-Therib, M.J. Putrescine catabolism in mammalian brain. *Biochem. J.* **144**(1), 29-35 (1974).
2. Lee, Y.R., Lee, J.W., Hong, J., *et al.* Simultaneous determination of polyamines and steroids in human serum from breast cancer patients using liquid chromatography-tandem mass spectrometry. *Molecules* **26**(4), 1153 (2021).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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