

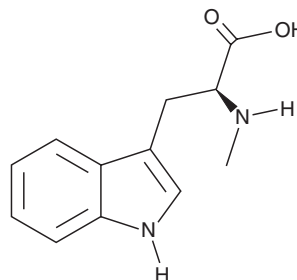
PRODUCT INFORMATION



L-Abrine

Item No. 34914

CAS Registry No.: 526-31-8
Formal Name: N-methyl-L-tryptophan
Synonyms: NPLC 0233, N-Methyltryptophan, N-methyl-L-Tryptophan
MF: C₁₂H₁₄N₂O₂
FW: 218.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

L-Abrine is supplied as a solid. A stock solution may be made by dissolving the L-abrine in the solvent of choice, which should be purged with an inert gas. L-Abrine is soluble in organic solvents such as methanol. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

L-Abrine is a methylated derivative of the essential amino acid L-tryptophan (Item No. 29600). It promotes growth in rats fed a tryptophan-deficient diet.¹ Unlike tryptophan, L-abrine does not affect sleep or wakefulness in rats.² Serum levels of L-abrine are decreased in patients after an acute ischemic stroke.³ Increased urine levels of L-abrine have been used as a biomarker for abrin poisoning.⁴

References

1. Gordon, W.G. and Jackson, R.W. The metabolism of certain monomethyltryptophanes. *J. Biol. Chem.* **110(1)**, 151-164 (1935).
2. Miletich, R.S., Djuricic-Nedelson, M., and Radulovacki, M. Tryptophan analogues and sleep in rats. *Research Communications in Psychology, Psychiatry & Behavior* **8(3)**, 235-241 (1983).
3. Qi, B., Zhang, Y., Xu, B., et al. Metabolomic characterization of acute ischemic stroke facilitates metabolomic biomarker discovery. *Appl. Biochem. Biotechnol.* **194(11)**, 5443-5455 (2022).
4. Wooten, J.V., Pittman, C.T., Blake, T.A., et al. A case of abrin toxin poisoning, confirmed via quantitation of L-abrine (N-methyl-L-tryptophan) biomarker. *J. Med. Toxicol.* **10(4)**, 392-394 (2014).

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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