

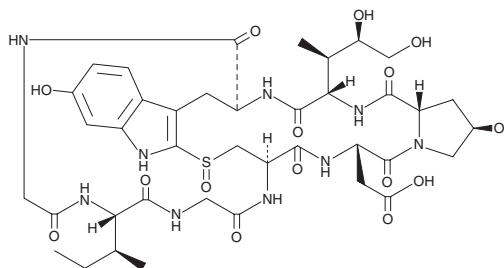
PRODUCT INFORMATION



β-Amanitin

Item No. 18142

CAS Registry No.: 21150-22-1
Formal Name: 1-L-aspartic acid-α-amanitin
MF: C₃₉H₅₃N₉O₁₅S
FW: 920.0
Purity: ≥90%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Amanita phalloides*



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

Laboratory Procedures

β-Amanitin is supplied as a crystalline solid. A stock solution may be made by dissolving the β-amanitin in water. The solubility of β-amanitin in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

β-Amanitin is a cyclic peptide found in several species of the *Amanita* genus, as well as other poisonous fungi.¹ It inhibits RNA polymerase II and III but not RNA polymerase I or bacterial RNA polymerase, thus preventing mammalian protein synthesis.^{2,3} The biological activity of this toxin is similar to that of α-amanitin (Item No. 17898) but differs structurally by the presence of a carboxyl group, which is useful for coupling reactions.⁴

References

- Walton, J.D., Hallen-Adams, H.E., and Luo, H. Ribosomal biosynthesis of the cyclic peptide toxins of *Amanita* mushrooms. *Biopolymers* **94**(5), 659-664 (2010).
- Gu, W., Powell, W., Mote, J., Jr., et al. Nascent RNA cleavage by arrested RNA polymerase II does not require upstream translocation of the elongation complex on DNA. *J. Biol. Chem* **268**(34), 25604-25616 (1993).
- Tipper, D.J. Inhibition of yeast ribonucleic acid polymerases by thiolutin. *J. Bacteriol.* **116**(1), 245-256 (1973).
- Anderl, J., Echner, H., and Faulstich, H. Chemical modification allows phallotoxins and amatoxins to be used as tools in cell biology. *Beilstein J. Org. Chem.* **8**, 2072-2084 (2012).

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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