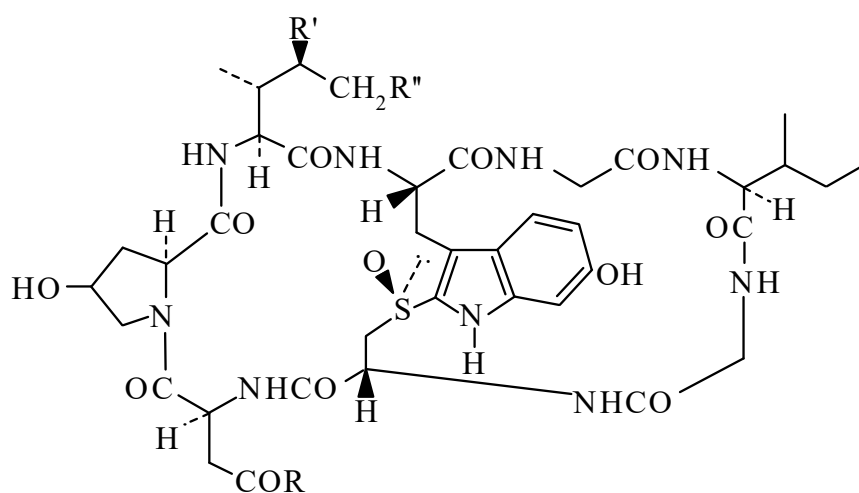




>>Entry Name: Amanitin

Synonym(s): Amantin. Amatoxin



α -Amanitin, R = NH₂ R' = R'' = OH
b-Amanitin, R = R' = R'' = OH
g-Amanitin, R = NH₂, R' = OH, R'' = H
e-Amanitin, R = R' = OH, R'' = H
Amanullin, R = NH₂, R' = R'' = H
Amanullinic acid, R = OH, R' = R'' = H

Related CAS Registry Numbers(s): 11030-71-0

>>Variant: α -Amanitin

CAS Registry Number: 23109-05-9

Molecular Formula: C₃₉H₅₄N₁₀O₁₄S

Molecular Weight: 918.98

Accurate Mass: 918.35417

Percentage Composition: C 50.97%; H 5.92%; N 15.24%; O 24.37%; S 3.49%

Biological Source: Toxic constit. of *Amanita phalloides*. Also from *Amanita verna*, *Amanita bisporigera*, *Galerina autumnalis*, *Galerina marginata* and *Galerina venenata*

Physical Description: Needles

Melting Point: Mp 254-255 dec.°

Optical Rotation: $[\alpha]_D^{20} +191$ (H₂O)

Solubility: BERDY SOL: Sol. MeOH, H₂O

UV: [neutral] $\lambda_{\max}$ 302 () (MeOH) (Berdy)

Hazard & Toxicity: Systemic effects in humans by ingestion. Can cause hepatic necrosis, liver failure and death if untreated. Nephrotoxic. LD₅₀ (mus, ipr) 0.1 mg/kg. Some human and exp. toxic effects are delayed (2-8 d after administration) *cf.* phallotoxins. Gastrointestinal effects occur 2-4 h after ingestion ; BERDY HAZD : LD₅₀ (mus, ipr) .1 mg/kg

Fluka: 6422

Sigma: A2263

>>Variant: β -Amanitin

Synonym(s): 1-L-Aspartic acid- α -amanitin, 9CI

CAS Registry Number: 21150-22-1

Molecular Formula: C₃₉H₅₃N₉O₁₅S

Molecular Weight: 919.965

Accurate Mass: 919.338186

Percentage Composition: C 50.92%; H 5.81%; N 13.70%; O 26.09%; S 3.49%

Biological Source: Toxic constit. of several spp. of *Amanita*, notably *Amanita phalloides* and also found in *Galerina autumnalis*, *Galerina venenata*, *Galerina marginata* and *Amanita bisporigera*

Physical Description: Cryst. (EtOH)

Melting Point: Mp 300°

Solubility: Sol. H₂O, EtOH; BERDY SOL: Sol. MeOH, H₂O

UV: [neutral] $\lambda_{\max}$ 302 () (MeOH) (Berdy)

Hazard & Toxicity: LD₅₀ (mus, ipr) 0.4 mg/kg ; BERDY HAZD : LD₅₀ (mus, ipr) .4 mg/kg

Sigma: A9641