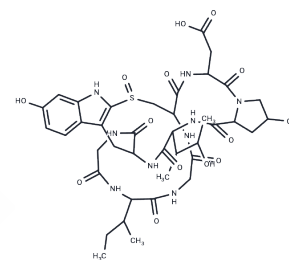


ε-Amanitin

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 21705-02-2 |
| Formula: | C ₃₉ H ₅₃ N ₉ O ₁₄ S |
| Molecular Weight: | 903.96 |
| Storage: | Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA. |



Biological Description

| | |
|---------------|---|
| Description | ε-Amanitin is a cyclic peptide obtained from various mushroom species. It exhibits a strong affinity for RNA polymerase II and effectively inhibits its activity. |
| Targets(IC50) | ADC Cytotoxin,DNA/RNA Synthesis |
| In vitro | The Amatoxin family, comprising compounds such as alpha-Amanitin, beta-Amanitin, gamma-Amanitin, epsilon-Amanitin (ε-Amanitin), Amanullin, Amanullinic acid, Amaninamide, Amanin, and Proamanullin, acts as highly effective and selective inhibitors of RNA polymerase II. This crucial enzyme is responsible for synthesizing messenger RNA (mRNA), microRNA, and small nuclear RNA (snRNA), essential for cell metabolism. By hindering mRNA synthesis, Amatoxins impede transcription and protein biosynthesis, leading to cellular apoptosis. This mechanism effectively halts cell growth and proliferation[1]. |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|------------|
| 1 mM | 1.1062 mL | 5.5312 mL | 11.0624 mL |
| 5 mM | 0.2212 mL | 1.1062 mL | 2.2125 mL |
| 10 mM | 0.1106 mL | 0.5531 mL | 1.1062 mL |
| 50 mM | 0.0221 mL | 0.1106 mL | 0.2212 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Jan Grunewald, et al. Amatoxin derivatives and conjugates thereof as inhibitors of rna polymerase. WO2016071856A1.

Kaya E, et al. Amanitin and phallotoxin concentration in Amanita phalloides var. alba mushroom. Toxicon. 2013; 76:225-233.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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