β-Amanitin

Cat. No.: HY-125586  
CAS No.: 21150-22-1  
Molecular Formula: C₃₉H₅₃N₉O₁₅S  
Molecular Weight: 919.95  
Target: DNA/RNA Synthesis; ADC Cytotoxin  
Pathway: Cell Cycle/DNA Damage; Antibody-drug Conjugate/ADC Related  
Storage: Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description  
β-Amanitin is a cyclic peptide toxin in the poisonous Amanita phalloides mushroom. β-Amanitin inhibits eukaryotic RNA polymerase II and III. β-Amanitin inhibits protein synthesis. β-Amanitin can be used as a cytotoxic component of antibody-drug conjugates (ADCs)[1][2].

IC₅₀ & Target  
Traditional Cytotoxic Agents

In Vitro  
β-Amanitin (0.01-100 µg/mL; 36 hours) shows toxicity in MCF-7 cells, and the rates of cell viability are calculated as 52%, 62%, 84%, 86%, and 91% at concentrations of 100, 10, 1, 0.1, and 0.01 µg/mL, respectively[2].
β-Amanitin shows a great inhibition of protein synthesis at both concentrations (10 µg/mL and 1 µg/mL) in MCF-7 cells for 24 hours[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[2]

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>MCF-7 cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration:</td>
<td>0.01, 0.1, 1, 10, 100 µg/mL</td>
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<tr>
<td>Incubation Time:</td>
<td>36 hours</td>
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<tr>
<td>Result:</td>
<td>Showed toxicity in MCF-7 cells.</td>
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</table>

REFERENCES


Caution: Product has not been fully validated for medical applications. For research use only.

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