

Ansamitocin P-3

Catalog No: tcsc1568



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

66584-72-3

Formula:

$C_{32}H_{43}ClN_2O_9$

Pathway:

Cell Cycle/DNA Damage;Cytoskeleton;Antibody-drug Conjugate/ADC Related

Target:

Microtubule/Tubulin;Microtubule/Tubulin;ADC Cytotoxin

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

Antibiotic C 15003P3;Maytansinol butyrate;C15003P3

Observed Molecular Weight:

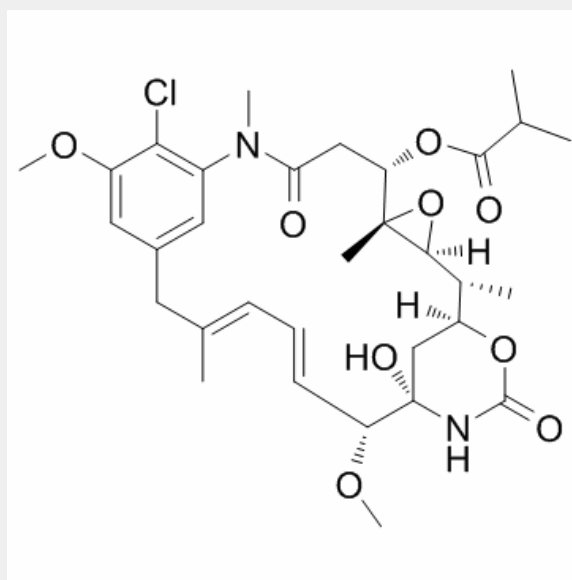
635.14

Product Description

Ansamitocin P-3 is a **microtubule** inhibitor. Ansamitocin P-3 is a macrocyclic antitumor antibiotic.

IC50 & Target: Microtubule^[1]

In Vitro: Ansamitocin P3 potently inhibits the proliferation of MCF-7, HeLa, EMT-6/AR1 and MDA-MB-231 cells in culture with a half-maximal inhibitory concentration of 20 ± 3 , 50 ± 0.5 , 140 ± 17 , and 150 ± 1.1 pM, respectively. Further, Ansamitocin P3 is found to bind to purified tubulin in vitro with a dissociation constant (K_d) of 1.3 ± 0.7 μ M. The binding of Ansamitocin P3 induces conformational changes in tubulin. Ansamitocin P3 inhibits the proliferation of MCF-7, HeLa, EMT-6/AR1 and MDA-MB-231 cells in culture in a concentration dependent manner. Flow cytometric analysis of PI-stained cells suggests that Ansamitocin P3 inhibits the cell cycle progression of MCF-7 cells in G2/M phase. For example, 26, 50 and 70% of the cells are found to be in G2/M phase in the absence and presence of 50 and 100 pM Ansamitocin P3, respectively^[2].



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