

# 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:**

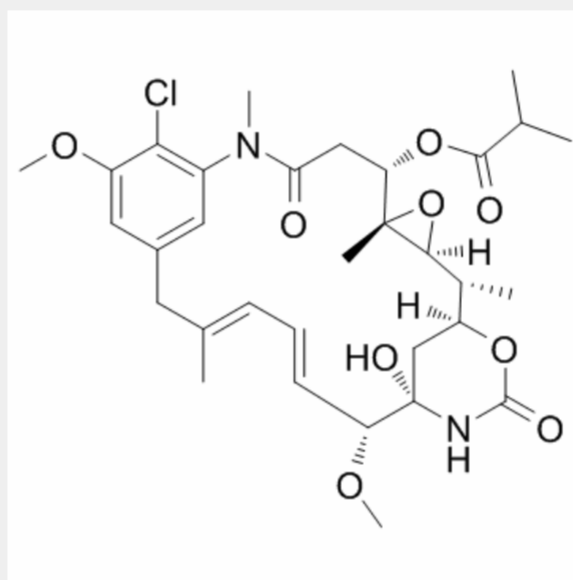
635.14

## Product Description

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

IC50 & Target: Microtubule<sup>[1]</sup>

**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  $20 \pm 3$ ,  $50 \pm 0.5$ ,  $140 \pm 17$ , and  $150 \pm 1.1$  pM, respectively. Further, Ansamitocin P3 is found to bind to purified tubulin in vitro with a dissociation constant ( $K_d$ ) of  $1.3 \pm 0.7$   $\mu$ 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<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!