

Catalog # 10-2199 Ansamitocin P-3 CAS# 66584-72-3



Fungal metabolite from *Actinosynnema pretiosum* which binds to the phomopsin A/rhizoxin site on tubulin.^{1,2} Ansamitocin P3 is a maytansine analog which displays potent cytotoxicity against various human tumor cell lines.^{2,3} Maytansine and its analogs cause extensive disassembly of microtubules and totally prevent tubulin spiralization.⁴

- 1) Li et al (1992) Binding selectivity of rhizoxin, phomopsin A, vinblastine and ansamitocin P-3 to fungal tubulins: differential interactions of these antimitotic agents with brain and fungal tubulins; Biochem, Biophys.Res.Commun., **187** 722
- 2) Venghateri et al. (2013) Ansamitocin P3 Depolymerizes Microtubules and Induces Apoptosis by Binding Tubulin at the Vinblastine Site; PLoS ONE 8 e75182
- 3) Suwanborirux et al. (1990) Ansamitocin P-3, a maytansinoid, from claopodium crispifolium and anomodo attenuates or associated actinomycetes; Experientia **46** 117
- 4) Ootsu et al. (1980) Effects of new antimitotic antibiotics, ansamitocins, on the growth of murine tumors in vivo and on the assembly of microtubules in vitro; Cancer Res. **40** 1707

PHYSICAL DATA

Molecular Weight:	635.16
Molecular Formula:	C32H43CIN2O9
Purity:	>90% remainder P-1, P-2, P-4 isomers (TLC: 1:9 CH ₃ OH:CH ₂ Cl ₂
	R _f =0.54); NMR conforms
Solubility:	May be dissolved in DMSO (50 mg/ml); or ethanol (30 mg/ml, warm)
Physical Description:	White powder
Storage and Stability:	Store desiccated as supplied at -20°C for up to 2 years. Store solutions
	at -20°C for up to 2 months

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