

## Catalog # 10-2199 Ansamitocin P-3

CAS# 66547-09-9 Lot # X101618

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

- 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
- 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: C<sub>32</sub>H<sub>43</sub>ClN<sub>2</sub>O<sub>9</sub>

Purity: >90% remainder P-1, P-2, P-4 isomers (TLC: 1:9 CH<sub>3</sub>OH:CH<sub>2</sub>Cl<sub>2</sub>

R<sub>f</sub>=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

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