

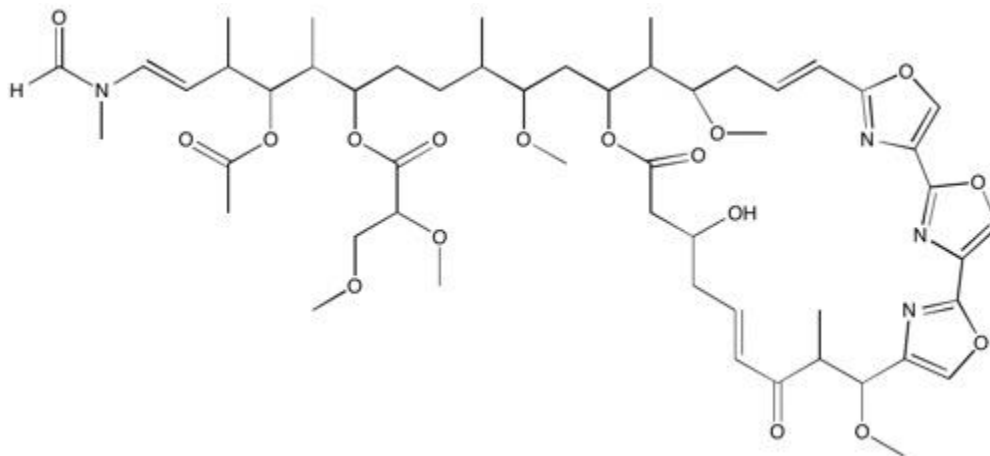
**Catalog # 10-2217**

**Mycalolide B**

CAS# 122752-21-0

From *Mycale* sp.

Lot # X101226



A novel marine natural product which binds to actin in a 1:1 molar ratio ( $K_d=13\text{-}20\text{ nM}$ ).<sup>1</sup> It selectively and completely depolymerizes F-actin to G-actin *via* a novel mechanism different from that of the cytochalasin D.<sup>2</sup> It is a novel and specific inhibitor of actomyosin ATPase.<sup>3</sup>

- 1) Saito *et al.* (1994), *Mycalolide B, a novel actin depolymerizing agent*; J. Biol. Chem., **269** 29710
- 2) Sugidachi *et al.* (1998), *Inhibition of rat platelet aggregation by mycalolide-B, a novel inhibitor of actin polymerization with a different mechanism of action from cytochalasin-D*; Thromb. Haemost., **79** 614
- 3) Hori *et al.* (1993), *Mycalolide-B, a novel and specific inhibitor of actomyosin ATPase isolated from marine sponge*; FEBS Lett., **322** 151

**PHYSICAL DATA**

Molecular Weight:	1027.16
Molecular Formula:	C <sub>52</sub> H <sub>74</sub> N <sub>4</sub> O <sub>17</sub>
Purity:	98% by HLC
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml)
Physical Description:	Colorless waxy film
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**