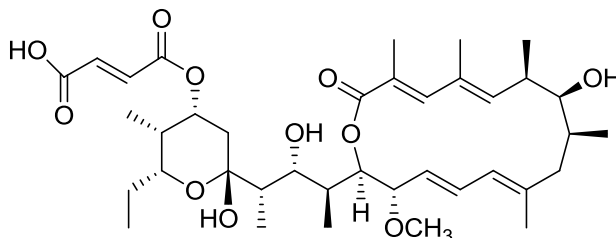


Hygrolidin

Code No.: **BIA-H1295**

Pack sizes: **1 mg, 5 mg**



Synonyms :

Specifications

CAS #	: 83329-73-1
Molecular Formula	: C ₃₈ H ₅₈ O ₁₁
Molecular Weight	: 690.9
Source	: <i>Streptomyces</i> sp.
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Hygrolidin is a 16-membered macrocyclic lactone closely related to the bafilomycins, active against *Valsa ceratosperma*, the pathogen of apple canker disease. Hygrolidin is active against SV40 tumor cells, and inhibits the growth of solid tumor-derived cell lines such as DLD-1 human colon cancer cells with increased cells in G1 and S phases. Hygrolidin decreases cyclin-dependent kinase (cdk) 4, cyclin D and cyclin B, and increases cyclin E and p21 levels. Hygrolidin-induced p21 inhibits cyclin A-cdk2 complex more strongly than cyclin E-cdk2 complex. It also increases p21 mRNA in DLD-1 cells, but not in normal fibroblasts.

References

1. The structure of a new antibiotic, hygrolidin. Seto H. *Tetrahedron Lett.* 1982, 23, 2667.
2. Hygrolidin induces p21 expression and abrogates cell cycle progression at G1 and S phases. Kawada M. *Biochem. Biophys. Res. Commun.* 2002, 298, 178.