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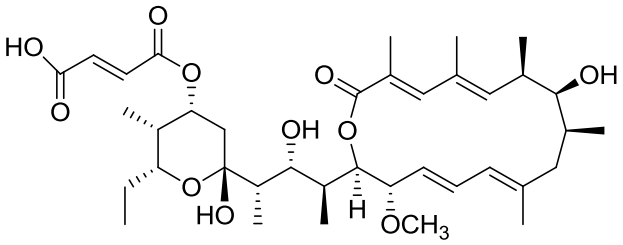
PRODUCT DATA SHEET

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	:	***Streptomyces* 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.

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