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| Product Name: | Hygrolidin |
| Product Number: | H033 |
| CAS Number: | 83329-73-1 |
| Molecular Formula: | C ₃₈ H ₅₈ O ₁₁ |
| Molecular Weight: | 690.9 |
| Appearance: | White solid |
| Storage Conditions: | -20°C |
| Description: | <p>Hygrolidin is a 16-membered macrocyclic lactone closely related to the bafilomycins, active against <i>Valsa ceratosperma</i>, 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.</p> <p>Hygrolidin is soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.</p> |
| References: | <p>The structure of a new antibiotic, hygrolidin. Seto H. <i>Tetrahedron Lett.</i> 1982, 23, 2667.</p> <p>Hygrolidin induces p21 expression and abrogates cell cycle progression at G1 and S phases. Kawada M. <i>Biochem. Biophys. Res. Commun.</i> 2002, 298, 178.</p> |