

Hygrobafilomycin, a cytotoxic and antifungal macrolide bearing a unique monoalkylmaleic anhydride moiety, from *Streptomyces varsoviensis*.

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Abstract

A new bafilomycin-type macrolide, named hygrobafilomycin (6), was isolated by a bioassay-guided selection and fractionation from a terrestrial actinomycete, *Streptomyces varsoviensis*, along with three known derivatives, bafilomycin D (3), C1 (4) and C2 (5). The structure of hygrobafilomycin was fully established by MS and NMR analyses, revealing a hygrolidin-bafilomycin hybrid with an unusual monoalkylmaleic anhydride moiety. Hygrobafilomycin (6) shows strong antifungal, antiproliferative and cytotoxic activities. In a panel of 40 tumor cell lines, compound 6 shows high cytotoxic potency (mean IC(50)=5.3 n).

Beteiligte Forschungseinheiten

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