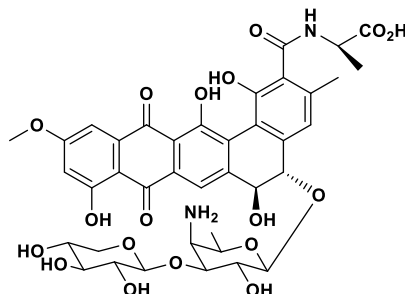


PRODUCT DATA SHEET

Date: Sep 27, 2022

Benanomicin B



Specifications

Code No.	: 02968
CAS# *	: 116249-66-2
Molecular Formula	: C ₃₉ H ₄₂ N ₂ O ₁₈
Molecular Weight	: 826.761
Source	: <i>Actinomadura</i> sp.MH193-16F4
Supplied as	: Powder, salt free form
Purity	: > 90% (HPLC)
Long Term Storage	: at - 20 °C
Solubility	: The salt free form of benanomicin B is soluble in DMSO and not soluble in H ₂ O.

Application Notes

Benanomicin B was isolated from the culture filtrates of *Actinomadura* sp. MH193-16F4.^{1,2)} It showed excellent activities against a wide range of fungi including *Candida*, *Cryptococcus* and *Saccharomyces*.^{1,4)} Benanomicin B also inhibited infection of human T-cells with human immunodeficiency virus (HIV-1) at 10~100 µg/mL and inhibited syncytium formation induced by HIV-1 at 10~100 µg/mL.³⁾ The antifungal and anti HIV-1 activities of benanomicins and their analogues have been studied.⁴⁾

References

- 1) New antifungal antibiotics, benanomicins A and B from an actinomycete. Takeuchi T, *et al. J Antibiot.* 1988 **41**(6) 807-811.
- 2) The structures of new antifungal antibiotics, benanomicins A and B. Gomi S, *et al. J Antibiot.* 1988 **41**(8) 1019-1028.
- 3) New antifungal antibiotics, benanomicins A and B inhibit infection of T-cell with human immunodeficiency virus (HIV) and syncytium formation by HIV. Hoshino H, *et al. J Antibiot.* 1989 **42**(2) 344-346.
- 4) Antifungal and antiviral activities of benanomicins and their analogues. Kondo S, *et al. J Antibiot.* 1991 **44**(11) 1228-1236.