

PRODUCT DATA SHEET

Code No.: BIA-P1916

Pack sizes: 0.5 mg, 2.5 mg

Palmarumycin C3

Synonyms :

Specifications

CAS # : 159934-11-9 Molecular Formula : $C_{20}H_{12}O_6$ Molecular Weight : 348.3

Source : Sphaeropsidales sp.
Appearance : Yellow to green solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in DMSO, dichloromethane, acetone or methanol

Application Notes

The palmarumycins are fungal metabolites isolated from Coniothyrium and Sphaeropsidales sp. with antifungal, antibacterial, antitumor and herbicidal properties. Palmarumycin C3 is a yellow-green pigment which inhibits Ras farnesyl-protein transferase. Palmarumycin C3 is a more potent antimicrobial agent against A. tumefaciens, B. subtilis, P. lachrymans, R. solanacearum, S. haemolyticus, X. vesicatoria and M. oryzae than its dehydroxy analogue palmarumycin C2, with MICs in the range of 6 – 13 μ g/mL. Palmarumycin C3 is a weak inhibitor of spore germination of M. oryzae and a modest antioxidant in DPPH radical scavenging and β -carotene/linoleic acid bleaching capacity assays.

References

- 1. Palmarumycins C1-C16 from Coniothyrium sp.: isolation, structure elucidation, and biological activity. Krohn K. et al. Liebigs Annalen der Chemie 1994, 11, 1099.
- 2. Antimicrobial and antioxidant activities and effect of 1-hexadecene addition on palmarumycin C2 and C3 yields in liquid culture of endophytic fungus Berkleasmium sp. Dzf12. Mou Y. et al. Molecul. 2013, 18, 15587.
- 3. Molecular pharmacology and antitumor activity of palmarumycin-based inhibitors of thioredoxin reductase. Powis G. et al. Mol Cancer Therap. 2006, 5, 630.

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