

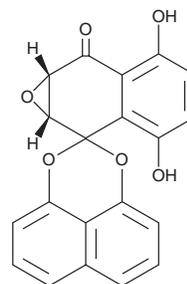
# PRODUCT INFORMATION



## Palmarumycin C3

Item No. 31447

**CAS Registry No.:** 159934-11-9  
**Formal Name:** 1aR,7aS-dihydro-3,6-dihydroxy-spiro[naphth[2,3-b]oxirene-2(7H),2'-naphtho[1,8-de][1,3]dioxin]-7-one  
**MF:** C<sub>20</sub>H<sub>12</sub>O<sub>6</sub>  
**FW:** 348.3  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Fungus/*Sphaeropsidales* sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Palmarumycin C3 is supplied as a solid. A stock solution may be made by dissolving the palmarumycin C3 in the solvent of choice, which should be purged with an inert gas. Palmarumycin C3 is soluble in DMSO, dichloromethane, acetone and methanol.

### Description

Palmarumycin C3 is a spirobisnaphthalene fungal metabolite that has been found in *C. palmarum* and has diverse biological activities.<sup>1,2</sup> It is active against the bacteria *A. tumefaciens*, *B. subtilis*, *P. lachrymans*, *R. solanacearum*, *S. haemolyticus*, and *X. vesicatoria* (MICs = 6.25, 6.25, 12.5, 12.5, 6.25, and 6.25 µg/ml, respectively).<sup>2</sup> Palmarumycin C3 is also active against the fungi *M. microspora* and *E. repens*, as well as the plant pathogenic fungi *F. oxysporum* and *U. violacea*, in agar diffusion assays when used at a concentration of 0.5 mg/disc.<sup>1</sup> It scavenges DPPH (Item No. 14805) radicals in cell-free assays and has antioxidant activity in a β-carotene-linoleic acid bleaching assay (IC<sub>50</sub>s = 37.57 and 7.41 µg/ml, respectively).

### References

1. Krohn, K., Michel, A., Flörke, U., *et al.* Biologically active metabolites from fungi, 5. Palmarumycins C<sub>1</sub>-C<sub>16</sub> from *Coniothyrium* sp.: Isolation, structure elucidation, and biological activity. *Eur. J. Org. Chem.* **1994**(11), 1099-1108 (1994).
2. Mou, Y., Meng, J., Fu, X., *et al.* Antimicrobial and antioxidant activities and effect of 1-hexadecene addition on palmarumycin C<sub>2</sub> and C<sub>3</sub> yields in liquid culture of endophytic fungus *Berkleasium* sp. *Dzf12. Molecules* **18**(12), 15587-15599 (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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