# PRODUCT INFORMATION



## (-)-Mycousnine

Item No. 31784

CAS Registry No.: 77480-55-8

Formal Name: (4aR,9bS)-2,6-diacetyl-4a,9b-dihydro-3,7,9-

trihydroxy-4a-methoxy-8,9b-dimethyl-1(4H)-

dibenzofuranone

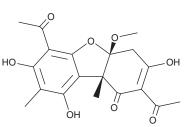
Synonym: Mycousunin MF:  $C_{19}H_{20}O_{8}$ FW: 376.4 ≥95% **Purity:** 

UV/Vis.:  $\lambda_{\text{max}}$ : 227, 285 nm

A solid Supplied as: -20°C Storage: Stability: ≥4 years

Item Origin: Fungus/Unidentified sp.

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



### **Laboratory Procedures**

(-)-Mycousnine is supplied as a solid. A stock solution may be made by dissolving the (-)-mycousnine in the solvent of choice, which should be purged with an inert gas. (-)-Mycousnine is soluble in the organic solvent DMSO.

#### Description

(-)-Mycousnine is a microbial metabolite and derivative of usnic acid (Item No. 22585) originally isolated from M. nawae that has antibacterial and antifungal activities. 1,2 It is active against the Grampositive bacteria B. subtilis, K. rhizophila, and S. aureus (MICs = 4, 8, and 4 g/ml, respectively) but not the Gram-negative bacteria E. coli, S. typhimurium, and K. pneumoniae (MICs = >128 g/ml for all).<sup>2</sup> (-)-Mycousnine is also active against the fungi T. mentagrophytes, T. rubrum, and C. albicans (MICs = 25, 25, and 100 μg/ml, respectively).1

#### References

- 1. Sassa, T. and Igarashi, M. Structures of (-)-mycousnine, (+)-isomycousnine and (+)-oxymycousnine, new usnic acid derivatives from phytopathogenic Mycosphaerella nawae. Agric. Biol. Chem. 54(9), 2231-2237 (1990).
- 2. Lee, J., Lee, J., Kim, G.J., et al. Mycousfurans A and B, antibacterial usnic acid congeners from the fungus Mycosphaerella sp., isolated from a marine sediment. Mar. Drugs 17(7), 422 (2019).

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

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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