

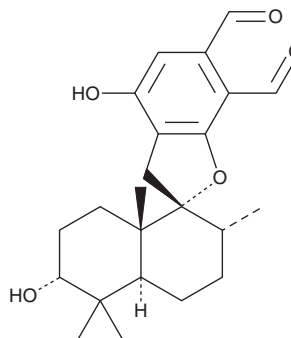
PRODUCT INFORMATION



Mer-NF5003F

Item No. 29961

CAS Registry No.: 149598-70-9
Formal Name: (1'R,2'R,4'aS,6'R,8'aS)-3',4',4'a,5',6',7',8',8'a-octahydro-4,6'-dihydroxy-2',5',5',8'a-tetramethyl-spiro[benzofuran-2(3H),1'(2'H)-naphthalene]-6,7-dicarboxaldehyde
Synonyms: F 1839M, NF 5003F, Stachybotrydial
MF: C₂₃H₃₀O₅
FW: 386.5
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Stachybotrys* sp.



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

Laboratory Procedures

Mer-NF5003F is supplied as a solid. A stock solution may be made by dissolving the Mer-NF5003F in the solvent of choice, which should be purged with an inert gas. Mer-NF5003F is soluble in ethanol, methanol, DMSO, and dimethyl formamide.

Description

Mer-NF5003F is a sesquiterpene originally isolated from *Stachybotrys* with diverse biological activities.¹⁻³ It inhibits avian myeloblastosis virus (AMV) protease (IC₅₀ = 7.8 μM).¹ Mer-NF5003F inhibits sialyltransferase 6N (ST6N), ST3O, and ST3N (IC₅₀s = 0.61, 6.7, and 10 μg/ml, respectively), as well as fucosyltransferase (IC₅₀ = 11.3 μg/ml).² It is active against herpes simplex virus 1 (HSV-1) *in vitro* (IC₅₀ = 4.32 μg/ml).³ Mer-NF5003F is also active against the multidrug-resistant *P. falciparum* strain K1 (IC₅₀ = 0.85 μg/ml).

References

1. Kaneto, R., Dobashi, K., Kojima, I., *et al.* Mer-NF5003B, E and F, novel sesquiterpenoids as avian myeloblastosis virus protease inhibitors produced by *Stachybotrys* sp. *J. Antibiot. (Tokyo)* **47(6)**, 727-730 (1994).
2. Lin, T.-W., Chang, W.-W., Chen, C.-C., *et al.* Stachybotrydial, a potent inhibitor of fucosyltransferase and sialyltransferase. *Biochem. Biophys. Res. Commun.* **331(4)**, 953-957 (2005).
3. Sawadjoon, S., Kittakoop, P., Isaka, M., *et al.* Antiviral and antiplasmodial spirodihydrobenzofuran terpenes from the fungus *Stachybotrys nephrospora*. *Planta Med.* **70(11)**, 1085-1087 (2004).

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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