PRODUCT INFORMATION

Ophiobolin A
Item No. 15381

CAS Registry No.: 4611-05-6
Formal Name: (2'S,3'S,3aR,5'R,6aS,9R,9aS,10aR)-1,3a,4,4',5',6a,7,8,9,9a,10,10a-dodecahydro-9-hydroxy-3',9,10a-trimethyl-5'-spiro[dicyclopenta[a,d]cyclooctene-3(2H),2'(3'H)-furan]-6-carboxaldehyde
Synonyms: Cochliobolin, NSC 114340
MF: C_{25}H_{36}O_{4}
FW: 400.6
Purity: ≥ 95%
Supplied as: A solid
Storage: -20°C
Stability: ≥ 2 years

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

Laboratory Procedures

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

Description

Calmodulin is a calcium-sensing protein that regulates a wide array of proteins involved in diverse cellular functions.\(^1,2\) Ophiobolin A is a sesterterpenoid fungal phytotoxin that binds and irreversibly antagonizes calmodulin, blocking the activation of calmodulin-dependent phosphodiesterase with an IC\(_{50}\) value of 9 μM.\(^3\) It antagonizes a variety of forms of calmodulin from plants and animals by binding covalently to conserved lysine residues.\(^4,5\)

References