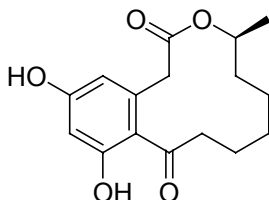


Curvularin

Code: **BIA-C1125**

Pack sizes: **1 mg, 5 mg**



Synonyms : **S-Curvularin, NSC 166071**

Specifications

CAS # : **10140-70-2**
Molecular Formula : **C₁₆H₂₀O₅**
Molecular Weight : **292.33**
Source : ***Penicillium* sp. FP1768**
Appearance : **White solid**
Purity : **>99% by HPLC**
Long Term Storage : **-20°C**
Solubility : **Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.**

Application Notes

Curvularin is a 12-membered macrocyclic lactone incorporating a resorcinylic moiety produced by a number of fungal species across several genera including *Curvularia*, *Penicillium* and *Alternaria*. Curvularin exhibits a distinctly different biological profile to the structurally similar resorcyclic acid lactones such as the zearalanones, radicicol and antibiotic LL Z1640-2. Curvularin has been shown to inhibit cell division by disrupting mitotic spindle formation and is known to be phytotoxic. More recent investigations have shown that curvularin is a highly selective transcription-based inhibitor of the iNOS-dependent NO production, acting on the Janus tyrosine kinase-STAT pathway. This action offers an approach to the development of drugs inhibiting iNOS overproduction associated with NO pathophysiology.

References

1. Studies in relation to biosynthesis. Part XX. The structure and biosynthesis of curvularin. Birch J. A. et al. *J. Chem. Soc.* **1959**, 3146.
2. Sporogen, S14-95 and S-curvularin, three inhibitors of human inducible nitric-oxide synthase expression isolated from fungi. Yao Y. et al. *Mol. Pharmacol.* **2003**, 63, 383.