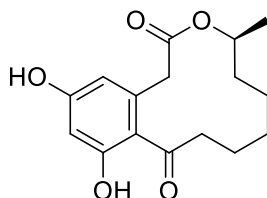


Curvularin

Code No.: **BIA-C1125**

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



Synonyms : S-Curvularin, NSC 166071

Specifications

CAS #	: 10140-70-2
Molecular Formula	: C ₁₆ H ₂₀ O ₅
Molecular Weight	: 292.3
Source	: <i>Penicillium</i> sp.
Appearance	: White solid
Purity	: >95% 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 including *Curvularia*, *Penicillium* and *Alternaria*. Curvularin exhibits a distinctly different biological profile to the structurally similar resorcyclic acid lactones such as the zearalenones, radicicol and LL Z1640-2. Curvularin inhibits 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 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.