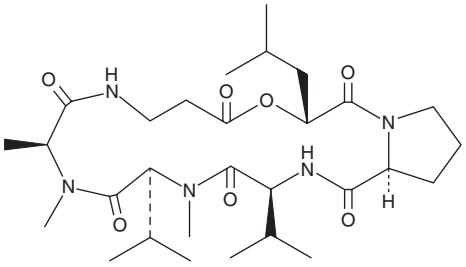
PRODUCT INFORMATION

Destruxin B_2

Item No. 30210

CAS Registry No.:	79386-00-8
Formal Name:	cyclo[N-methyl-L-alanyl-β-alanyl-(2R)-2-hydroxy-4-methylpentanoyl-L-prolyl-L-valyl-N-methyl-L-valyl]
MF:	$C_{29}H_{49}N_5O_7$
FW:	579.7
Purity:	≥95%
Supplied as:	A solution in acetonitrile
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

Destruxin B_2 is supplied as a solution in acetonitrile. To change the solvent, simply evaporate the acetonitrile under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as dichloromethane and DMSO purged with an inert gas can be used. The solubility of destruxin B_2 in these solvents is approximately 10 mg/ml.

Description

Destruxin B_2 is a cyclic hexadepsipeptide mycotoxin that has been found in *M. anisopliae* and has antiviral, insecticidal, and phytotoxic activities.[1-3] It inhibits secretion of hepatitis B virus surface antigen (HBsAg) by Hep3B cells expressing hepatitis B virus (HBV) DNA (IC_{50} = 1.3 µM).[1] Destruxin B_2 is toxic to Sf9 insect cells in an electric cell-substrate impedance sensing (ECIS) test with a 50% inhibitory concentration ($ECIS_{50}$) value of 92 µM.[2] It is also phytotoxic to *B. napus* leaves.[3]

References

1. Yeh, S.F., Pan, W., Ong, G.-T., *et al.* Study of structure-activity correlation in destruxins, a class of cyclodepsipeptides possessing suppressive effect on the generation of hepatitis B virus surface antigen in human hepatoma cells. *Biochem. Biophys. Res. Commun.* **229(1)**, 65-72 (1996).
2. Male, K.B., Tzeng, Y.-M., Montes, J., *et al.* Probing inhibitory effects of destruxins from *Metarhizium anisopliae* using insect cell based impedance spectroscopy: Inhibition *vs* chemical structure. *Analyst* **134(7)**, 1447-1452 (2009).
3. Buchwaldt, L. and Green, H. Phytotoxicity of destruxin B and its possible role in the pathogenesis of *Alternaria brassicae*. *Plant Pathol.* **41(1)**, 55-63 (1992).

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