# PRODUCT INFORMATION



# Destruxin B<sub>2</sub> Item No. 30210

CAS Registry No.: 79386-00-8

Formal Name: cyclo[N-methyl-L-alanyl-β-alanyl-

(2R)-2-hydroxy-4-methylpentanoyl-

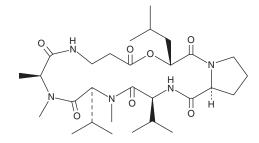
L-prolyl-L-valyl-N-methyl-L-valyl]

MF:  $C_{29}H_{49}N_5O_7$ 579.7 FW: **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 B2 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 B2 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. <sup>1-3</sup> It inhibits secretion of hepatitis B virus surface antigen (HBsAg) by Hep3B cells expressing hepatitis B virus (HBV) DNA (IC<sub>50</sub> =  $1.3 \mu$ M).<sup>1</sup> Destruxin B<sub>2</sub> is toxic to Sf9 insect cells in an electric cell-substrate impedance sensing (ECIS) test with a 50% inhibitory concentration (ECIS<sub>50</sub>) value of 92 μM.<sup>2</sup> It is also phytotoxic to B. napus leaves.<sup>3</sup>

#### 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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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