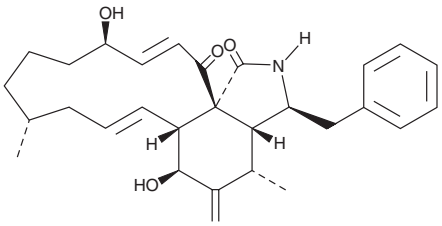
PRODUCT INFORMATION

Deoxaphomin

Item No. 44753

CAS Registry No.:	51053-39-5
Formal Name:	(3S,3aR,4S,6S,6aR,7E,10R,14R,15E,17aR)-3,3a,4,5,6,6a,9,10,11,12,13,14-dodecahydro-6,14-dihydroxy-4,10-dimethyl-5-methylene-3-(phenylmethyl)-1H-Ccclotridec[d]isoindole-1,17(2H)-dione
MF:	$C_{29}H_{37}NO_4$
FW:	463.6
Purity:	≥95%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Fungus/*Drechslera* sp.



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

Laboratory Procedures

Deoxaphomin is supplied as a solid. A stock solution may be made by dissolving the deoxaphomin in the solvent of choice, which should be purged with an inert gas. Deoxaphomin is soluble in methanol and DMSO.

Description

Deoxaphomin is a polyketide synthase-derived cytochalasin that has been found in *P. semeniperda* and has diverse biological activities.[1-4] It inhibits anti-mouse IgG-induced capping in isolated mouse splenic lymphocytes by 70% when used at a concentration of 20 µM and inhibits actin filament elongation in C3H fibroblasts by 66% at 2 µM.[3] Deoxaphomin (100 µM) inhibits seed germination and radicle growth induced by GR24 (Item No. 13210) in the broomrapes *O. crenata* and *P. ramosa*.[2] It inhibits the growth of OE21, U373 MG, SK-MEL-28, A549, B16/F10, and Hs 683 cancer cells (IC_{50}s = 0.75, 1.7, 5.9, 2.2, and 0.61 µM, respectively).[4]

References

1. Steyn, P.S. The biosynthesis of polyketide-derived mycotoxins. *J. Environ. Pathol. Toxicol. Oncol.* **11(1)**, 47-59 (1992).
2. Cimmino, A., Fernández-Aparicio, M., Andolfi, A., *et al.* Effect of fungal and plant metabolites on broomrapes (*Orobanche* and *Phelipanche* spp.) seed germination and radicle growth. *J. Agric. Food Chem.* **62(43)**, 10485-10492 (2014).
3. Yahara, I., Harada, F., Sekita, S., *et al.* Correlation between effects of 24 different cytochalasins on cellular structures and cellular events and those on actin in vitro. *J. Cell Biol.* **92(1)**, 69-78 (1982).
4. Van Goietsenoven, G., Mathieu, V., Andolfi, A., *et al. In vitro* growth inhibitory effects of cytochalasins and derivatives in cancer cells. *Planta Med.* **77(7)**, 711-717 (2011).

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