# **PRODUCT** INFORMATION



## Spirohexenolide A

Item No. 25116

CAS Registry No.: Formal Name:	1193347-22-6 (3E,7Z,9R,11E,13E,14aR,17S,18aS)- 6,9,10,14a,17,18-hexahydro-9- hydroxy-13,14a,16,17-tetramethyl-4,7- etheno-3,18a-methano-2H,18aH-1,5- benzodioxacyclohexadecin-2,19-dione	
MF:	C <sub>25</sub> H <sub>28</sub> O <sub>5</sub>	
FW:	408.5	)' ` ` ` `</th
Purity:	≥95%	
Supplied as:	A solid	$\langle   $
Storage:	-20°C	
Stability:	≥4 years	HO

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

#### Laboratory Procedures

Spirohexenolide A is supplied as a solid. A stock solution may be made by dissolving the spirohexenolide A in the solvent of choice, which should be purged with an inert gas. Spirohexenolide A is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

#### Description

Spirohexenolide A is a metabolite originally isolated from S. platensis.<sup>1</sup> It inhibits growth in the NCI-60 cancer cell line panel (GI<sub>50</sub>s = 0.1-17  $\mu$ M) with the RPMI-8226 multiple myeloma, HOP-92 lung, and SW620 colon cancer cell lines being most sensitive (GI<sub>50</sub>s = 254, 191, and 565 nM, respectively). Spirohexenolide A also binds to human macrophage migration inhibition factor (MIF;  $K_d$  = 35.9  $\mu$ M) and inhibits MIF cellular uptake and lysosomal localization in HCT116 cells.<sup>2</sup>

#### References

- 1. Kang, M., Jones, B.D., Mandel, A.L., et al. Isolation, structure elucidation, and antitumor activity of spirohexenolides A and B. J. Org. Chem. 74(23), 9054-9061 (2009).
- 2. Yu, W.-L., Jones, B.D., Kang, M., et al. Spirohexenolide A targets human macrophage migration inhibitory factor (hMIF). J. Nat. Prod. 76(5), 817-823 (2013).

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

#### SAFETY DATA

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.

#### WARRANTY AND LIMITATION OF REMEDY

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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM