# **PRODUCT** INFORMATION



## **Eupalinolide** A

Item No. 33808

CAS Registry No.:	877822-40-7	
Formal Name:	4-hydroxy-2-methyl-2-butenoic acid,	0
	(2E)-(3aR,4R,6Z,9S,10Z,11aR)-9-(acetyloxy)-	
	6-[(acetyloxy)methyl]-2,3,3a,4,5,8,9,11a-	
	octahydro-10-methyl-3-methylene-2-	. ∣ н
	oxocyclodeca[b]furan-4-yl ester	
Synonym:	Eupalinolide G	
MF:	$C_{24}H_{30}O_{9}$	
FW:	462.5	o ĭ ĭ Ĥ I∖\
Purity:	≥98%	
Supplied as:	A solid	∼ о∕ он
Storage:	-20°C	Ô
Stability:	≥4 years	
Item Origin:	Plant/Eupatorium lindleyanum	

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

#### Laboratory Procedures

Eupalinolide A is supplied as a solid. A stock solution may be made by dissolving the eupalinolide A in the solvent of choice, which should be purged with an inert gas. Eupalinolide A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of eupalinolide A is approximately 15 mg/ml in ethanol and approximately 30 mg/ml in DMSO and DMF.

Eupalinolide A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, eupalinolide A should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Eupalinolide A has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Eupalinolide A is a sesquiterpene lactone that has been found in E. lindleyanum and has cellular chaperone-inducing activity.<sup>1,2</sup> It activates heat shock factor 1 (Hsf1) and induces the expression and increases the protein levels of heat shock protein 70 (Hsp70) in B16 cells when used at concentrations of 5, 7.5, and 10 µg/ml.<sup>2</sup>

#### References

- 1. Yang, N.-Y., Duan, J.-A., Qian, D.-W., et al. Simultaneous quantification of four sesquiterpene lactones in Eupatorium lindleyanum DC. by RP-LC. Chromatographia 70(1), 205-209 (2009).
- 2. Yamashita, Y., Ikeda, T., Matsuda, M., et al. Purification and characterization of HSP-inducers from Eupatorium lindleyanum. Biochem. Pharmacol. 83(7), 909-922 (2012).

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

#### SAFFTY 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.

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