# **PRODUCT** INFORMATION



## Phenylpyropene A

Item No. 29594

CAS Registry No.:	189564-20-3	
Formal Name:	(3S,4R,4aR,6S,6aS,12R,12aS,12bS)-3,6-	
	bis(acetyloxy)-4-[(acetyloxy)methyl]-	
	1,3,4,4a,5,6,6a,12,12a,12b-decahydro-	
	12-hydroxy-4,6a,12b-trimethyl-	о он         : н     о
	9-phenyl-2H,11H-naphtho[2,1-b]	
	pyrano[3,4-e]pyran-11-one	ў        <b>і   №</b> н
MF:	C <sub>32</sub> H <sub>38</sub> O <sub>10</sub>	
FW:	582.6	
Purity:	≥95%	
Supplied as:	Residue	
Storage:	-20°C	-
Stability:	≥4 years	
Item Origin:	Fungus/Penicillium sp.	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

### Laboratory Procedures

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

### Description

Phenylpyropene A is a fungal metabolite originally isolated from P. griseofulvum that has enzyme inhibitory and insecticidal activities.<sup>1-3</sup> It inhibits acyl-coenzyme A:cholesterol acyltransferase (ACAT;  $IC_{50} = 0.8 \mu M$ ).<sup>1</sup> Phenylpyropene A inhibits diacylglycerol acyltransferase (DGAT) in rat liver microsomes (IC<sub>50</sub> = 78.7  $\mu$ M). It induces 100% mortality in 100% of M. persicae when used at a concentration of 5 ppm.<sup>3</sup>

#### References

- 1. Kwon, O.E., Rho, M.C., Song, H.Y., et al. Phenylpyropene A and B, new inhibitors of acyl-CoA: Cholesterol acyltransferase produced by Penicillium griseofulvum F1959. J. Antibiot. (Tokyo) 55(11), 1004-1008 (2002).
- 2. Lee, S.W., Rho, M.C., Choi, J.H., et al. Inhibition of diacylglycerol acyltransferase by phenylpyropenes produced by Penicillium griseofulvum F1959. J. Microbiol. Biotechnol. 18(11), 1785-1788 (2008).
- 3. Horikoshi, R., Goto, K., Mitomi, M., et al. Identification of pyripyropene A as a promising insecticidal compound in a microbial metabolite screening. J. Antibiot. (Tokyo) 70(3), 272-276 (2017).

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.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 08/15/2023

## CAYMAN CHEMICAL

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