

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

## SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



# PRODUCT INFORMATION



## **Pellitorine**

Supplied as:

Item No. 11662

CAS Registry No.: 18836-52-7

Formal Name: (2E,4E)-N-(2-methylpropyl)-2,4-decadienamide

MF:  $C_{14}H_{25}NO$ FW: 223.4 **Purity:** ≥95%  $\lambda_{max}$ : 259 nm A crystalline solid UV/Vis.:

-20°C Storage: Stability: ≥2 years

Plant/Piper longum Item Origin:

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

#### **Laboratory Procedures**

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

#### Description

Pellitorine is an amide alkaloid that has been found in P. nigrum and has diverse biological activities. 1-4 It induces mortality in C. pipiens pallens, A. aegypti, and A. togoi third instar larvae with LC50 values of 0.86, 0.92, and 0.71 ppm, respectively.<sup>2</sup> Pellitorine is cytotoxic to HL-60 leukemia and MCF-7 breast cancer cells (IC<sub>50</sub>s = 13 and 1.8  $\mu$ g/ml, respectively).<sup>3</sup> It inhibits production of TNF- $\alpha$ , IL-1 $\alpha$ , and IL-1 $\beta$  and phosphorylation of ERK1/2 induced by high mobility group protein B1 (HMGB1) in human umbilical vein endothelial cells (HUVECs) when used at concentrations of 10 and 20 μM.<sup>4</sup> Pellitorine (9 μg/animal, i.v.) prolongs survival time in a mouse model of sepsis induced by HMGB1.

#### References

- 1. Wei, K., Li, W., Koike, K., et al. New amide alkaloids from the roots of Piper nigrum. J. Nat. Prod. 67(6), 1005-1009 (2004).
- 2. Park, I.K., Lee, S.G., Shin, S.C., et al. Larvicidal activity of isobutylamides identified in Piper nigrum fruits against three mosquito species. J. Agric. Food Chem. 50(7), 1866-1870 (2002).
- Ee, G.C., Lim, C.M., Rahmani, M., et al. Pellitorine, a potential anti-cancer lead compound against HL6 and MCT-7 cell lines and microbial transformation of piperine from Piper Nigrum. Molecules 15(4), 2398-2404 (2010).
- 4. Ku, S.K., Lee, I.C., Kim, J.A., et al. Anti-septic effects of pellitorine in HMGB1-induced inflammatory responses in vitro and in vivo. Inflammation 37(2), 338-348 (2014).

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.

### WARRANTY AND LIMITATION OF REMEDY

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, 05/14/2020

#### **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