

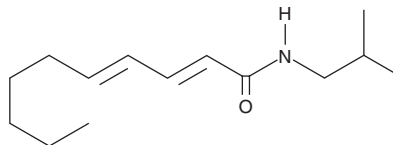
PRODUCT INFORMATION



Pellitorine

Item No. 11662

CAS Registry No.: 18836-52-7
Formal Name: (2E,4E)-N-(2-methylpropyl)-2,4-decadienamamide
MF: C₁₄H₂₅NO
FW: 223.4
Purity: ≥95%
UV/Vis.: λ_{max}: 259 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years
Item Origin: Plant/*Piper longum*



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 Pellitorine is cytotoxic to HL-60 leukemia and MCF-7 breast cancer cells (IC₅₀s = 13 and 1.8 μg/ml, respectively).³ It inhibits production of TNF-α, IL-1α, and IL-1β 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.⁴ 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).
3. 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.

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.

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