

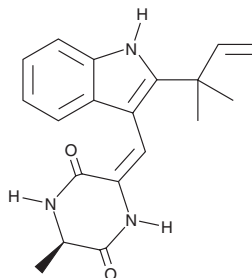
PRODUCT INFORMATION



Neoechinulin A

Item No. 43283

CAS Registry No.: 51551-29-2
Formal Name: 3Z-[[2-(1,1-dimethyl-2-propen-1-yl)-1H-indol-3-yl]methylene]-6S-methyl-2,5-piperazinedione
MF: C₁₉H₂₁N₃O₂
FW: 323.4
Purity: ≥85%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungi/*Aspergillus chevalieri*



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

Laboratory Procedures

Neoechinulin A is supplied as a solid. A stock solution may be made by dissolving the neoechinulin A in the solvent of choice, which should be purged with an inert gas. Neoechinulin A is slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

Neoechinulin A is an isoprenyl indole alkaloid that has been found in *Eurotium* and has diverse biological activities.¹⁻⁴ It is active against *B. cereus* and *P. vulgaris* (MICs = 6.25 and 25 μM, respectively).¹ Neoechinulin A (100 μM) induces apoptosis in HeLa cervical cancer cells and inhibits LPS-induced nitrite, prostaglandin E₂ (PGE₂; Item No. 14010), IL-1β, and TNF-α production in RAW 264.7 macrophages.^{2,3} It reduces the formation of nitrotyrosine induced by SIN-1 (Item No. 82220) in primary rat neurons when used at a concentration of 200 μM.⁴

References

1. Zhao, D., Cao, F., Guo, X.-J., *et al.* Antibacterial indole alkaloids and anthraquinones from sewage-derived fungus *Eurotium* sp. *Chem. Nat. Compd.* **54**(2), 399-401 (2018).
2. Wijesekara, I., Li, Y.-X., Vo, T.-S., *et al.* Induction of apoptosis in human cervical carcinoma HeLa cells by neoechinulin A from marine-derived fungus *Microsporum* sp. *Proc. Biochem.* **48**(1), 68-72 (2014).
3. Kim, K.-S., Cui, X., Lee, D.-S., *et al.* Anti-inflammatory effect of neoechinulin a from the marine fungus *Eurotium* sp. SF-5989 through the suppression of NF-κB and p38 MAPK Pathways in lipopolysaccharide-stimulated RAW264.7 macrophages. *Molecules* **18**(11), 13245-13259 (2013).
4. Maruyama, K., Ohuchi, T., Yoshida, K., *et al.* Protective properties of neoechinulin A against SIN-1-induced neuronal cell death. *J. Biochem.* **136**(1), 81-87 (2004).

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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