

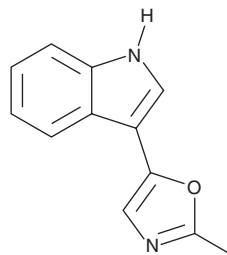
PRODUCT INFORMATION



Pimprinine

Item No. 25507

CAS Registry No.: 13640-26-1
Formal Name: 3-(2-methyl-5-oxazolyl)-1H-indole
Synonym: NSC 80793
MF: C₁₂H₁₀N₂O
FW: 198.2
Purity: ≥95%
Supplied as: A powder
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Streptomyces* sp.



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

Laboratory Procedures

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

Description

Pimprinine is an alkaloid originally isolated from *Streptomyces* that has diverse biological activities, including anticonvulsant, antiplatelet, and antimicrobial properties.¹⁻⁴ It inhibits deamination of serotonin (5-HT; Item No. 14332) by monoamine oxidase (MAO; IC₅₀ = 48 μM).¹ Pimprinine (80 mg/kg) increases the minimum and maximum electroshock seizure thresholds in mice.² In a mouse model of tremorine-induced tremors, it increases the latency to tremor onset, as well as reduces the intensity and duration of tremors and the analgesic activity of tremorine when administered at a dose of 80 mg/kg. Pimprinine inhibits aggregation of rabbit platelets induced by arachidonic acid (Item Nos. 90010 | 10006607) or collagen (IC₅₀s = 3 and 25 μg/ml, respectively) and arachidonic acid-induced thromboxane A₂ (TXA₂) synthesis in rabbit platelets *in vitro* (IC₅₀ = 6 μg/ml).⁴ It also inhibits the growth of *M. tuberculosis*, *P. varioti*, *C. albicans*, and *S. lutea* *in vitro* (MICs = 25, 1, 1.5, and 2.5 μg/ml, respectively).^{2,3}

References

1. Takeuchi, T., Ogawa, K., Iinuma, H., *et al.* Monoamine oxidase inhibitors isolated from fermented broths. *J. Antibiot. (Tokyo)* **26(3)**, 162-167 (1973).
2. Naik, S.R., Harindran, J., and Varde, A.B. Pimprinine, an extracellular alkaloid produced by *Streptomyces* CDRIL-312: Fermentation, isolation and pharmacological activity. *J. Biotechnol.* **88(1)**, 1-10 (2001).
3. Intaraudom, C., Rachtawee, P., Suvannakad, R., *et al.* Antimalarial and antituberculosis substances from *Streptomyces* sp. BCC26924. *Tetrahedron* **67(39)**, 7593-7597 (2011).
4. Umehara, K., Yoshida, K., Okamoto, M., *et al.* Studies on new antiplatelet agents, WS-30581 A and B. *J. Antibiot. (Tokyo)* **37(10)**, 1153-1160 (1984).

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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