

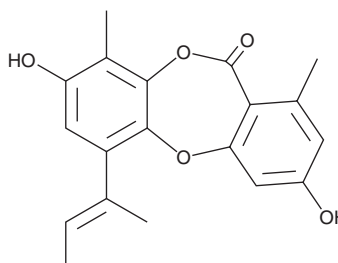
PRODUCT INFORMATION



Unguinol

Item No. 24207

CAS Registry No.: 36587-59-4
Formal Name: 3,8-dihydroxy-1,9-dimethyl-6-[(1E)-1-methyl-1-propen-1-yl]-11H-dibenzo[b,e][1,4]dioxepin-11-one
MF: C₁₉H₁₈O₅
FW: 326.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Aspergillus* sp.



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

Laboratory Procedures

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

Description

Unguinol is a depsidone originally isolated from *A. unguis*.¹ It is an inhibitor of pyruvate phosphate dikinase (PPDK; IC₅₀ = 42.3 μM).² It inhibits the growth of plants utilizing C₄, but not C₃, carbon fixation. Unguinol also inhibits the growth of the bacteria *S. aureus* and *V. harveyi* (GI₅₀S = 8.7 and 69.5 μM, respectively) and H460, MCF-7, and SF-268 cancer cells (GI₅₀S = 28.2, 50.8, and 44.3 μM, respectively).

References

1. Stodola, F.H., Vesonder, R.F., Fennell, D.I., *et al.* New depsidone from *Aspergillus unguis*. *Phytochemistry* **11**(6), 2107-2108 (1972).
2. Motti, C.A., Bourne, D.G., Burnell, J.N., *et al.* Screening marine fungi for inhibitors of the C₄ plant enzyme pyruvate phosphate dikinase: Unguinol as a potential novel herbicide candidate. *Appl. Environ. Microbiol.* **73**(6), 1921-1927 (2007).

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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