

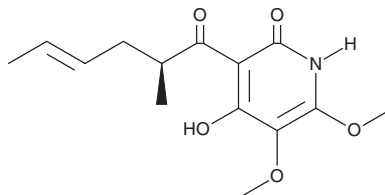
PRODUCT INFORMATION



Harzianopyridone

Item No. 19620

CAS Registry No.: 137813-88-8
Formal Name: 4-hydroxy-5,6-dimethoxy-3-[(2S,4E)-2-methyl-1-oxo-4-hexen-1-yl]-2(1H)-pyridinone
Synonym: (-)-Harzianopyridone
MF: C₁₄H₁₉NO₅
FW: 281.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Trichoderma harzianum* sp. FKI-1509



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

Laboratory Procedures

Harzianopyridone is supplied as a solid. A stock solution may be made by dissolving the harzianopyridone in the solvent of choice, which should be purged with an inert gas. Harzianopyridone is soluble in the organic solvent methanol.

Description

Harzianopyridone is an atpenin-like inhibitor of mammalian and nematode mitochondrial complex II (succinate:ubiquinone oxidoreductase; SQR) with IC₅₀ values of 0.017, 0.2, and 2 μM for bovine, rat, and nematode complex II, respectively.¹ It also inhibits nematode quinol-fumarate reductase (QFR; IC₅₀ = 0.36 μM). Harzianopyridone is selective for complex II over complexes I and III in rats and cattle and complex I in nematodes (IC₅₀s >100 μM). It has antibacterial and antifungal activity (EC₅₀s = 35.9, 42.2, 60.4, and 50.2 μg/ml against *R. solani*, *S. rolfsii*, *M. phaseolina*, and *F. oxysporum*, respectively).^{2,3}

References

1. Miyadera, H., Shiomi, K., Ui, H., *et al.* Atpenins, potent and specific inhibitors of mitochondrial complex II (succinate-ubiquinone oxidoreductase). *Proc. Natl. Acad. Sci. U.S.A.* **100**(2), 473-477 (2003).
2. Cutler, H.G., and Jacyno, J.M. Biological activity of (-)-harzianopyridone isolated from *Trichoderma harzianum*. *Agric. Biol. Chem.* **55**(10), 2629-2631 (1991).
3. Ahluwalia, V., Kumar, J., Rana, V.S., *et al.* Comparative evaluation of two *Trichoderma harzianum* strains for major secondary metabolite production and antifungal activity. *Nat. Prod. Res.* **29**(10), 914-920 (2015).

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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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