

PRODUCT INFORMATION



NG 012

Item No. 27509

CAS Registry No.: 141731-76-2

Formal Name: 7R,8,11S,12,15R,16,23R,24,27R,28-decahydro-2,4,18,20-tetrahydroxy-11-(hydroxymethyl)-7,15,23,27-tetramethyl-5H,9H,13H,21H,25H-dibenzo[k,u][1,5,9,15,19]pentaoxacyclotetracosin-5,9,13,21,25-pentone

Synonym: BK223-A

MF: C₃₂H₃₈O₁₅

FW: 662.6

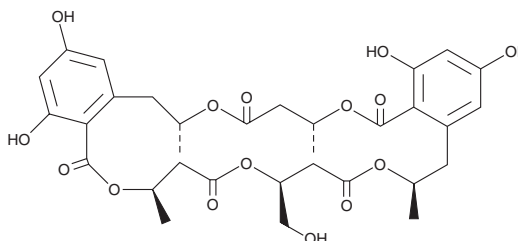
Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Fungus/*Penicillium* sp.



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

Laboratory Procedures

NG 012 is supplied as a solid. A stock solution may be made by dissolving the NG 012 in the solvent of choice, which should be purged with an inert gas. NG 012 is soluble in organic solvents such as ethanol, methanol, and chloroform.

Description

NG 012 is a fungal metabolite originally isolated from *P. verruculosum* that has fungicidal and nerve growth factor-potentiating properties.^{1,2} It inhibits the growth of the plant pathogenic fungi *B. cinerea*, *P. teres*, *P. lingam*, *S. sclerotiorum*, and *M. fructigena* *in vitro*.¹ NG 012 (50 μM) increases the efficacy of the antifungal miconazole (Item No. 15420) against *C. albicans*, reducing the IC₅₀ value from 19.2 to 2.5 μM.³ It also potentiates neurite outgrowth induced by nerve growth factor (NGF) in PC12 cells in a concentration-dependent manner.²

References

1. Breinholt, J., Jensen, G.W., and Nielsen, R.I. Antifungal macrocyclic polylactones from *Penicillium verruculosum*. *J. Antibiot. (Tokyo)* **46**(7), 1101-1108 (1993).
2. Ito, M., Maruhashi, M., Sakai, N., et al. NG-011 and NG-012, novel potentiators of nerve growth factor. I. Taxonomy, isolation, and physico-chemical and biological properties. *J. Antibiot. (Tokyo)* **45**(10), 1559-1565 (1992).
3. Arai, M., Tomada, H., Okuda, T., et al. Funicone-related compounds, potentiators of antifungal miconazole activity, produced by *Talaromyces flavus* FKI-0076. *J. Antibiot. (Tokyo)* **55**(2), 172-180 (2002).

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