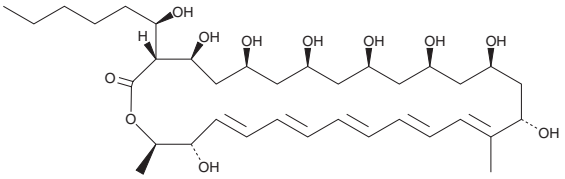
PRODUCT INFORMATION

Filipin III (solution)

Item No. 46790

CAS Registry No.: 480-49-9
Formal Name: 4S,6S,8S,10R,12R,14R,16S,27S-octahydroxy-3R-(1R-hydroxy-hexyl)17,28R-dimethyl-oxacyclooctacosa-17E,19E,21E,21E,23E,25E-pentaen-2-one
Synonyms: NSC 3364, NSC 38092
MF: $C_{35}H_{58}O_{11}$
FW: 654.8
Purity: ≥90%
Supplied as: A 1 mg/ml solution in DMSO
Storage: -20°C
Stability: ≥2 years
Item Origin: Microbial



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

Description

Filipin III is a polyene and an active component of the polyene antibiotic filipin complex (Item No. 25073).[1] It is active against various fungi, including *B. dermatitidis*, *C. neoformans*, *H. capsulatum*, *C. albicans*, and *T. mentagrophytes* (MICs = 1-10 µg/ml). Filipin III induces hemolysis of isolated rabbit erythrocytes (EC_{50} = 0.8 µg/ml).[2] It induces apoptosis in HaCaT keratinocytes in a concentration-dependent manner.[3] Filipin III binds to cholesterol and has been used to fluorescently label sterols in biological structures.[4,5] The filipin complex has excitation maxima of 338 and 357 nm and an emission maxima of 480 nm.[6]

References

1. Bergy, M.E. and Eble, T.E. The filipin complex. *Biochemistry* **7(2)**, 653-659 (1968).
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3. Gniadecki, R. Depletion of membrane cholesterol causes ligand-independent activation of Fas and apoptosis. *Biochem. Biophys. Res. Commun.* **320(1)**, 165-169 (2004).
4. Bittman, R. and Fischkoff, S.A. Fluorescence studies of the binding of the polyene antibiotics filipin 3, amphotericin B, nystatin, and lagosin to cholesterol. *Proc. Natl. Acad. Sci. USA* **69(12)**, 3795-3799 (1972).
5. Boutté, Y., Men, S., and Grebe, M. Fluorescent *in situ* visualization of sterols in *Arabidopsis* roots. *Nat. Protoc.* **6(4)**, 446-456 (2011).
6. Drabikowski, W., Lagwinska, E., and Sarzala, M.G. Filipin as a fluorescent probe for the location of cholesterol in the membranes of fragmented sarcoplasmic reticulum. *Biochim. Biophys. Acta* **291(1)**, 61-70 (1973).

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.

WARRANTY AND LIMITATION OF REMEDY
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