

## PRODUCT DATA SHEET

Code No.: BIA-F1616

Pack sizes: 1 mg, 5 mg

Synonyms : 14-Deoxylagosin

## Specifications

Filipin III

CAS # : 480-49-9 Molecular Formula :  $C_{35}H_{58}O_{11}$  Molecular Weight : 654.8

Source : Streptomyces sp.

Appearance : Pale yellow solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

## **Application Notes**

Filipin III is the major component of the filipin complex, a family of pentaene antifungal metabolites first isolated from Streptomyces filipinensis and reported by researchers at Upjohn in 1955. Filipin III is a potent broad spectrum antifungal agent that also exhibits antitumor and antiviral activities. Filipin III acts by binding cell membrane sterols, disrupting membrane integrity. This sterol selectivity has led to the use of filipin III as a routine diagnostic probe for quantifying cholesterol in mammalian cells.

## References

- 1. Filipin, an antifungal antibiotic: Isolation and properties. Whitfield G.B. et al., J. Am. Chem. Soc. 1955, 77, 4799.
- 2. Separation of polyene antifungal antibiotics by high speed liquid chromatography. Mechlinski W. & Schaffner C.P. J. Chromatogr. 1974, 99, 619.
- 3. Inhibition of fungi by filipin and its antagonism by sterols. Gottlieb D. et al., Phytopathology 1960, 50, 594.

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