

### PRODUCT DATA SHEET

Code No.: BIA-F1619

Pack sizes: 5 mg, 25 mg

# Filipin complex

OH OH OH 
$$R_1$$
  $R_2$ 

OH
OH
OH
OH
OH
OH
OH
Filipin II -H -OH
Filipin III -OH -OH

Synonyms :

## Specifications

CAS # : 11078-21-0

Molecular Formula : C<sub>35</sub>H<sub>58</sub>O<sub>11</sub> (for Filipin III)

Molecular Weight : 654.8

Source : Streptomyces sp.

Appearance : Yellow solid
Purity : >95% by HPLC

Long Term Storage : -20°C

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

## **Application Notes**

Filipin complex comprises a family of pentaene macrocyclic lactones first isolated from Streptomyces filipinensis and reported by researchers at Upjohn in 1955. Filipin complex consists of four analogues, with filipin III comprising the bulk (>70%) of the complex. Filipin complex is a potent broad spectrum antifungal agent that also exhibits antitumor and antiviral activities. Filipin complex acts by binding cell membrane sterols, disrupting membrane integrity.

### 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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