

## Catalog # 10-1490 Filipin III

CAS# 480-49-9
From Streptomyces filipinensis
Lot # X105232

Filipin III is a polyene macrolide antibiotic. It may be used in a double staining procedure for the detection of lipoproteins. Binds specifically to cholesterol forming a fluorescent complex which may be used for staining. Disrupts the lipid raft/caveolae endocytosis pathway. Prevents pathological prion protein accumulation by reducing endocytosis and inducing cellular PrP release.

- 1) Smejkal and Hof *et al.* (1994), *cholesterol-specific probe for lipoproteins immobilized on nitrocellulose membranes*; Biotechniques, **16** 68
- 2) Bornig and Geyer *et al.* (1974), *Staining of cholesterol with the fluorescent antibiotic "filipin"*; Acta Histochemica, **50** 110
- 3) Huo et al. (2003), Lipid rafts/caveolae are essential for insulin-like growth factor-1 receptor signaling during 3T3-L1 preadipocyte differentiation induction; J. Biol. Chem., **278** 11561
- 4) Marella et al. (2002), Filipin prevents pathological prion protein accumulation by reducing endocytosis and inducing cellular PrP release; J. Biol. Chem., **277** 25457

## PHYSICAL DATA

 $\begin{array}{lll} \mbox{Molecular Weight:} & 654.83 \\ \mbox{Molecular Formula:} & C_{35}H_{58}O_{11} \\ \mbox{Purity:} & 99\% \ \mbox{by HPLC} \end{array}$ 

Solubility:

NMR: (Conforms)
Methanol (up to 10 mg/ml)

Physical Description: White or slightly yellow solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

methanol may be stored under inert gas at -20°C for up to 2 months.

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