

Product Name:	Filipin III
Product Number:	F021
CAS Number:	480-49-9
Molecular Formula:	$C_{35}H_{58}O_{11}$
Molecular Weight:	654.8
Appearance:	Pale yellow solid
Storage Conditions:	-20°C
Description:	<p>Filipin III is the major component of the filipin complex, a family of pentaene antifungal metabolites first isolated from <i>Streptomyces filipinensis</i> and reported by researchers at Upjohn in 1955. Filipin III is a potent broad spectrum antifungal agent that also exhibits antitumor and antiviral activities.</p> <p>Filipin III is soluble in ethanol, methanol, DMF or DMSO.</p>
Mechanism of Action:	<p>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.</p>
References:	<p>Filipin, an antifungal antibiotic: Isolation and properties. Whitfield G.B. et al. J. Am. Chem. Soc. 1955, 77, 4799.</p> <p>Separation of polyene antifungal antibiotics by high speed liquid chromatography. Mechlinski W. & Schaffner C.P. J. Chromatogr. 1974, 99, 619.</p> <p>Inhibition of fungi by filipin and its antagonism by sterols. Gottlieb D. et al. Phytopathology 1960, 50, 594.</p>