

Stigmasterol

Catalog Number: 14496

DESCRIPTION

Stigmasterol is a naturally occurring phytosterol lipid that is growing in the bioprocessing space for its ability to improve lipid nanoparticle (LNP)-based mRNA transfection efficiency. LNPs are well known for facilitating the safe and effective delivery of mRNA to target cells, thus enabling therapeutic action. Cholesterol derivatives like stigmasterol offer two major benefits to LNP formulations: they can improve the stability of the LNP and they can increase the transfection efficiency in both in cell cultures and in vivo. Polysciences' high purity, transfection grade stigmasterol can be used in conjunction with our other cationic lipid products to provide reliable performance for a variety of bioprocessing applications.

SPECIFICATIONS

CAS Number	83-48-7
Purity	>95%
Molecular Weight	412.69
Appearance	White to off-white powder
Storage	10-25°C, protect from light

PREPARATION

Stigmasterol stock solutions can be prepared by dissolving in an organic solvent of choice. Stigmasterol is soluble in chloroform (10 mg/ml), DMF (2 mg/ml), and slightly soluble in DMSO (< 1 mg/mL) and ethanol (<1 mg/ml). Pre-warmed solvent and sonication of the solution may improve the solubility. Once dissolved, the stock solution can be stored at -20°C for up to 1 month. Before use, ensure that the stock solution returns to room temperature.

