

Product Data Sheet

Product Name: IR-117-17

Cat. No.: GC26274

Chemical Properties

Cas. No. 2940241-38-1

Chemical Name 5-(((3-(dibutylamino)propyl)amino)methyl)-6-hydroxyundecane-1,11-diyl (9Z,9'Z,12Z,12'Z)-bis(octadeca-9,12-dienoate)

SMILES CCCCC/C=C\C/C=C\C\CCCCCCCC(OCCCCC(C(CCCCCOC(CCCCCC/C=C\C/C=C\C\CCCC)=O)CNCCCN(CCCC)CCCC)O)=O

Formula C₅₉H₁₁₀N₂O₅ M.Wt 927.5

Solubility Chloroform: Soluble; Ethanol: Soluble Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

IR-117-17 is an ionizable cationic and biodegradable amino lipid.¹ It has been used in the generation of lipid nanoparticles (LNPs). Nebulized administration of LNPs containing IR-117-17 and the cationic lipid 1,2-dioleoyl-2-trimethylammoniumpropane, among other components, and encapsulating reporter mRNA induce luciferase luminescence in the lung and nasal passages in mice. Nebulized administration of the same LNP formulation but encapsulating Cre mRNA induces the expression of Cre in cells of the large and small airways, as well as alveolar macrophages and epithelial cells, in Ai14 mice engineered to express the fluorescent protein tdTomato upon translation of Cre.

WARNING This product is not for human or veterinary use.

Caution: Product has not been fully validated for medical applications. For research use only.

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