

Product Data Sheet

Product Name: Lipid 88
 Cat. No.: GC91631

Chemical Properties

Cas. No. 2982842-99-7

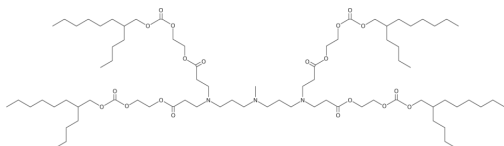
Formula $C_{79}H_{147}N_3O_{20}$ M.Wt 1459

Solubility Chloroform: Sparingly soluble: 1-10 mg/ml, Ethanol: Sparingly soluble: 1-10 mg/ml
 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

Lipid 88 is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vivo*.^[1] LNPs containing lipid 88 and encapsulating mRNA encoding severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) spike glycoprotein increase anti-spike glycoprotein IgG titers in bronchoalveolar lavage fluid (BALF), as well as increase the percentage of CD8^{+} , $\text{CD8}^{+}\text{CD44}^{+}$, CD4^{+} , and $\text{CD4}^{+}\text{CD44}^{+}$ T cells in the lungs and spleen, in mice after two doses three weeks apart. LNPs containing lipid 88 and encapsulating mRNA encoding SARS-CoV-2 spike glycoprotein inhibit reductions in body weight, increase serum levels of anti-spike glycoprotein IgG and IgA titers, and reduce lung and nasal wash viral titers in a hamster model of SARS-CoV-2 Omicron BQ.1 subvariant infection.

References:

[1]. Ye, Z., Bonam, S.R., McKay, L.G.A., et al. Monovalent SARS-COV-2 mRNA vaccine using optimal UTRs and LNPs is highly immunogenic and broadly protective against Omicron variants. *Proc. Natl.*

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

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