

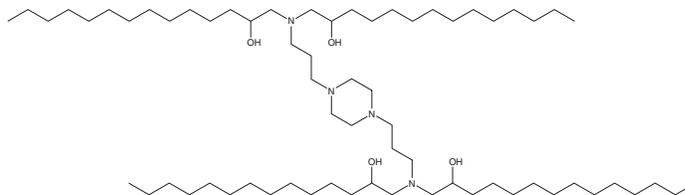
PRODUCT INFORMATION



IC8

Item No. 37986

CAS Registry No.: 2349307-32-8
Formal Name: 1,1',1'',1'''-((piperazine-1,4-diylbis(propane-3,1-diyl))bis(azanetriyl))tetrakis(tetradecan-2-ol)
MF: C₆₆H₁₃₆N₄O₄
FW: 1,049.8
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

IC8 is supplied as a solid. A stock solution may be made by dissolving the IC8 in the solvent of choice, which should be purged with an inert gas. IC8 is slightly soluble in DMSO and dimethyl formamide.

Description

IC8 is an ionizable cationic lipid.^{1,2} It has been used in combination with other lipids for the formation of lipid nanoparticles (LNPs). Immunization with severe acute respiratory coronavirus 2 (SARS-CoV-2) spike glycoprotein mRNA in IC8- and manganese-containing LNPs induces IgG responses to SARS-CoV-2 Delta and Omicron variants in mice.¹ Administration of mRNA encoding B7-H3 X CD3 bispecific T cell engaging (BiTE) antibodies in IC8-containing LNPs reduces tumor growth in MV4-11 and A375 mouse xenograft models.²

References

1. Fan, N., Chen, K., Zhu, R., *et al.* Manganese-coordinated mRNA vaccines with enhanced mRNA expression and immunogenicity induce robust immune responses against SARS-CoV-2 variants. *Sci. Adv.* **8**(51), eabq3500 (2022).
2. Huang, C., Duan, X., Wang, J., *et al.* Lipid nanoparticle delivery system for mRNA encoding B7H3-redirected bispecific antibody displays potent antitumor effects on malignant tumors. *Adv. Sci. (Weinh)* e2205532 (2022).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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