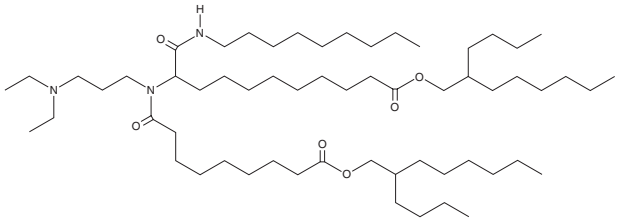
PRODUCT INFORMATION

Lipid 168

Item No. 45754

CAS Registry No.: 3051823-08-3
Formal Name: 10-[[9-[(2-butyloctyl)oxy]-1,9-dioxononyl][3-(diethylamino)propyl]amino]-11-(nonylamino)-11-oxo-undecanoic acid, 2-butyloctyl ester
MF: $C_{60}H_{117}N_3O_6$
FW: 976.6
Purity: ≥98%
Supplied as: A 10 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Lipid 168 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Lipid 168 is slightly soluble (0.1-1 mg/ml) in chloroform.

Description

Lipid 168 is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of microRNA, mRNA, and single-guide RNA (sgRNA) *in vivo*.[1] LNPs containing lipid 168 accumulate in the bone marrow. LNPs encapsulating adenine base editor (ABE8e) mRNA and sgRNA-25 have been used to induce gene editing and the expression of *HBG*, the gene encoding γ-globin, in a humanized mouse model of β-thalassemia.

Reference

1. Xu, S., Liang, D., Wang, Q., *et al.* In vivo genome editing of human haematopoietic stem cells for treatment of blood disorders using mRNA delivery. *Nat. Biomed. Eng.* **10(3)**, 473-489 (2026).

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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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM