

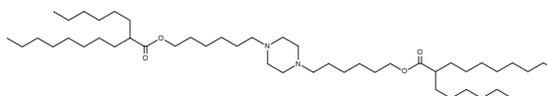
PRODUCT INFORMATION



Lipid PPz-2R1

Item No. 43160

CAS Registry No.: 2832061-40-0
Formal Name: piperazine-1,4-diylbis(hexane-6,1-diyl) bis(2-hexyldecanoate)
MF: C₄₈H₉₄N₂O₄
FW: 763.3
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Description

Lipid PPz-2R1 is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro* and *in vivo*.¹ LNPs containing lipid PPz-2R1 and encapsulating an mRNA reporter selectively accumulate in lungs over the heart, liver, spleen, and kidneys in mice. LNPs containing lipid PPz-2R1 and encapsulating mRNA encoding phosphatase and tensin homolog (PTEN) increase PTEN protein levels in PTEN-deficient Lewis lung carcinoma (LLC) cells. Lipid PPz-2R1-containing LNPs encapsulating PTEN mRNA reduce tumor growth in an orthotopic murine LLC model when administered alone or in combination with an antibody targeting programmed cell death protein 1 (PD-1).

Reference

1. Hu, Y., He, X., Chen, P., *et al.* Lung-targeted delivery of PTEN mRNA combined with anti-PD-1-mediated immunotherapy for in situ lung cancer treatment. *Acta Biomater.* (2025).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/27/2025

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