



PPZ-A10

Cat. No.:	OB0626WX-3897
Appearance:	Liquid
Purity:	≥95%
Identity:	Confirmed by NMR, TLC, and HPLC.
Size:	5 mg; 10 mg; 25 mg; 50 mg

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	PPZ-A10 is an ionizable cationic lipid developed for the bottom-up fabrication of responsive lipid nanoparticles tailored for gene silencing and transcript expression. This ionizable core structure dictates distinct organ-tropism and cellular selectivity profiles, preferentially directing encapsulated nucleotide sequences into visceral Kupffer cells and splenic macrophage populations.
Formulation	Ethanol solution (10 mg/mL)
Synonyms	N,N'-(piperazine-1,4-diylbis(propane-3,1-diyl))bis(3-(didecylamino)propanamide); 2941268-67-1
CAS No.	2941268-67-1
Compound CID	166594009
Formula	$C_{56}H_{114}N_6O_2$
Formula Weight	903.6

Specification

Solubility in Ethanol	10 mg/mL
IUPAC Name	3-(didecylamino)-N-[3-[4-[3-[3-(didecylamino)propanoylamino]propyl]piperazin-1-yl]propyl]propanamide
InChI	InChI=1S/C56H114N6O2/c1-5-9-13-17-21-25-29-33-43-59(44-34-30-26-22-18-14-10-6-2)49-39-55(63)57-41-37-47-61-51-53-62(54-52-61)48-38-42-58-56(64)40-50-60(45-35-31-27-23-19-15-11-7-3)46-36-32-28-24-20-16-12-8-4/h5-54H2,1-4H3,(H,57,63)(H,58,64)



InChI Key	PXNLDSAGMDIEAT-UHFFFAOYSA-N
Canonical SMILES	<chem>O=C(CCN(CCCCCCCCC)CCCCCCCC)NCCCN1CCN(CCCNC(CCN(CCCCCCCCC)CCCCCCCC)=O)CC1</chem>
Stability	1 year
Storage	Storage at -20°C.
Applications	PPZ-A10 serves as a synthetic lipid reagent for the development of lipid-based nucleic acid delivery systems. It supports formulation screening, optimization of nanoparticle composition, and investigation of lipid structure-property relationships in LNP research.