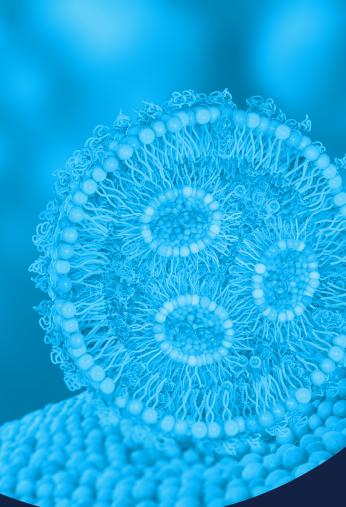




Lipids for Cell and Gene Therapy

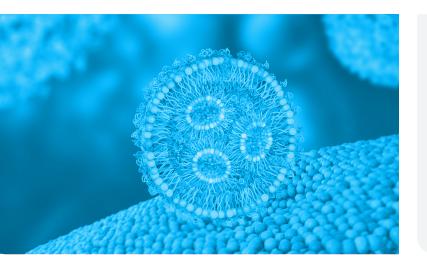




LIPIDS FOR CELL AND GENE THERAPY

Bring your therapies from bench to clinic with our chemistry expertise and application knowledge.

A dependable and high-quality supply of lipids is crucial for the successful development and commercialization of new vaccines and therapies. We provide a diverse range of lipid excipients that are well-suited for LNP, NLC and SLN formulation, as well as contract services for custom lipid synthesis.



KEY FEATURES

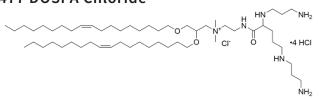
- Critical lipid components for mRNA vaccines(COVID-19) and drug delivery applications.
- GMP grade lipids for clinical trials and commercial manufacturing.
- High purity cationic, pegylated, ionizable, and phospholipids.

CATIONIC LIPIDS

Cationic lipids are used in LNPs to encapsulate oligonucleotides and facilitate cellular uptake and endosomal escape. Our cationic lipids such as DOTAP-Cl are used for high efficiency transfection, mRNA vaccine and drug delivery applications.

FEATURED PRODUCTS 14475 DOTAP Chloride

14477 DOSPA Chloride



CAT #	DESCRIPTION
14475-MS	DOTAP Methyl Sulfate
14487	DPTAP
14488	DMTAP
14476	DOTMA Chloride
14475	DOTAP Chloride
14477	DOSPA Chloride
14486	DSTAP Chloride
26445	DOTAP Chloride GMP

Our advanced chemistry expertise enables us to synthesize complex compounds including high purity DOSPA Chloride.

IONIZABLE LIPIDS

Ionizable lipids are neutral at physiological pH but protonated at acidic pH. When protonated, ionizable lipids condense nucleic acids through electrostatic interactions and promote fusion with endosomal membranes.

F	F	ΔΤ	U	R	F	D	P	R	0	D	U	C ₁	г
		_	v	П	-	\boldsymbol{v}		\mathbf{r}	v	$\boldsymbol{\mathcal{L}}$	v	•	

14496 DLin-MC3-DMA

CAT#	DESCRIPTION
14478	DODMA
14489	DODAP
14496	DLin-MC3-DMA
14477	DOSPA Chloride*

*DOSPA is cationic at physiological pH, and further protonated as acidic pH

PHOSPHOLIPIDS

Phospholipids affect the size and surface chemistry of LNPs, improving intracellular uptake. They also provide stability to the LNP and protect therapeutic payloads from degradation. They are used in vaccine and drug nanodelivery platforms.

FEATURED PRODUCT 26437 DSPC

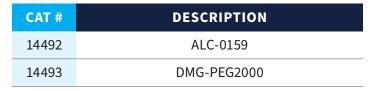
CAT #	DESCRIPTION
26437	DSPC
26447	DMPC
26450	DOPC
26453	DSPG, Sodium Salt
26449	DPPC
26451	DOPE
26452	DSPE

PEGYLATED LIPIDS

PEGylated lipids prevent opsonization and improve LNP stability and drug bioavailability. Demonstrated as a safe and efficient component for therapeutic delivery, they help ensure that vaccines remain in the bloodstream long enough to reach their target cells, meaning enhanced immunogenicity and increased protection against disease.

FEATURED PRODUCT

14493 DMG-PEG2000





CHOLESTEROL & DERIVATIVES

Cholesterol and its derivatives stabilize LNPs during storage and circulation by increasing the membrane rigidity. They also improve cellular uptake efficiency of therapeutic payloads by facilitating stable encapsulation and preventing leakage from the liposomal core. These lipids are also believed to minimize antigenic stimuli to the immune system, resulting in more tolerable vaccines.

CAT #	DESCRIPTION
26436	Cholesterol
14495	Beta-sitosterol
14497	Stigmasterol
14401	CHEMS

FEATURED PRODUCT

CUSTOM SYNTHESIS

With our extensive expertise in chemistry, quality control, and regulatory compliance, we are equipped to provide you with customized lipid synthesis and formulation services that are tailored to your unique needs. At Kyfora Bio, we offer support for phase-appropriate and cost-effective GMP manufacturing, enabling us to provide you with high-quality products at any scale.

