



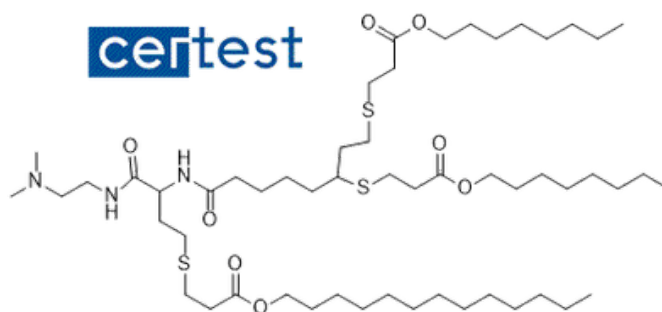
CP-LC-1067

Product number 860798

CP-LC-1067 is manufactured and distributed under license from Certest Biotec S.L. CP-LC-1067 is an ionizable lipid that successfully encapsulates mRNA. In vivo studies carried out in mice show that lipid nanoparticle (LNP) formulations using ionizable lipid CP-LC-1067 exhibit comparable mRNA expression and favorable safety profiles compared to industry-leading LNP formulations. LNPs formulated with CP-LC-1067 have shown a primary biodistribution in the lungs.

Key product features include:

- Shows good encapsulation and expression of mRNA
- High endosomal escape compared to industry-leading formulations
- Pulmonary delivery of nucleic acid payloads



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Product information

Physical and chemical properties

CAS number ¹ 3091879-17-0

Molecular weight 1018.61

Purity and material grade >99%, Research-Use-Only, not intended for use in humans

Storage temperature -20 °C

Application Pulmonary delivery of nucleic acid cargos (mRNA) via lipid nanoparticle formulations (LNPs)

pKa (measured by TNS fluorescence titration) 8.3

¹ CAS is a registered trademark of the American Chemical Society
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Figure 1

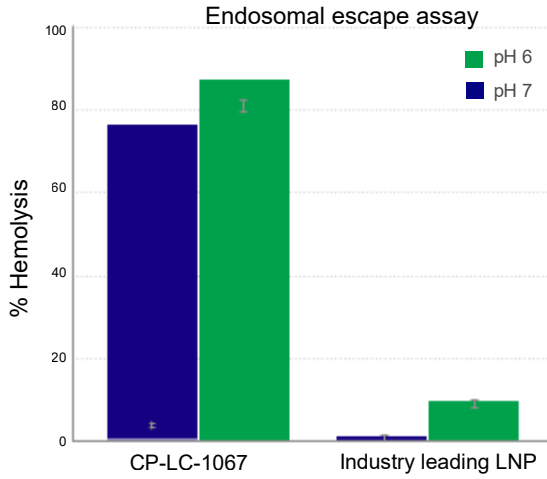


Figure 2

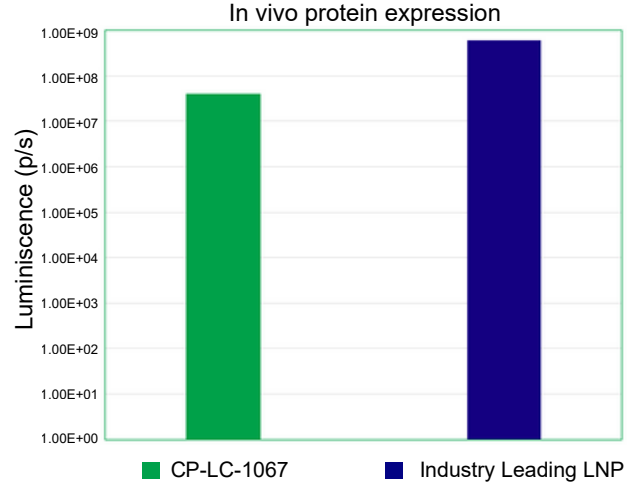


Figure 3

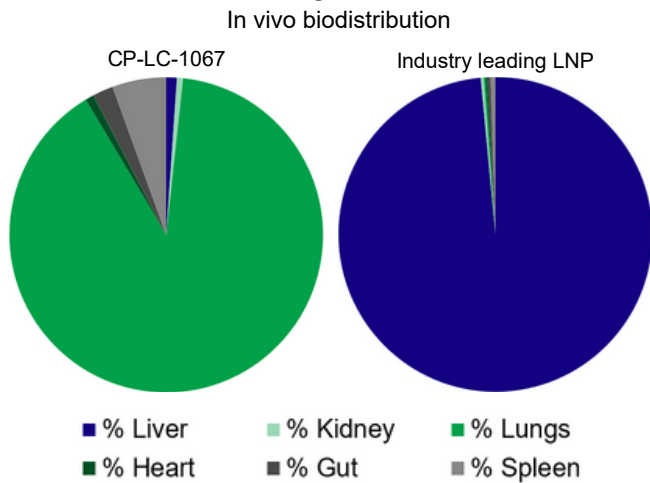


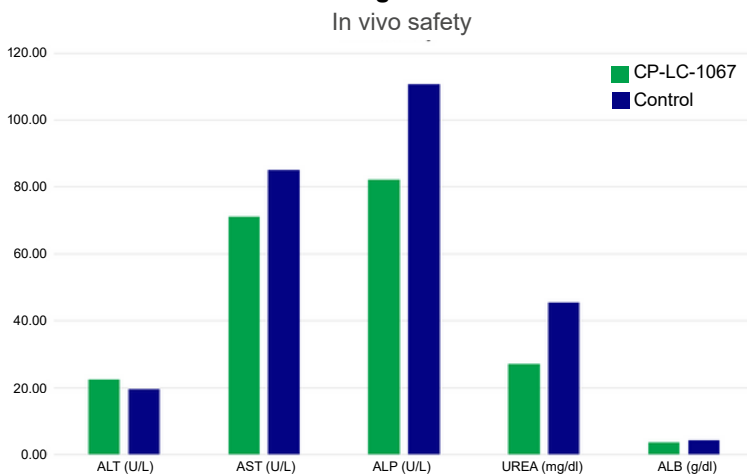
Table 1

Lipid nanoparticles formulated with 50 mol% CP-LC-1067, 10 mol% DOPE, 38.5 mol% cholesterol, and 1.5 mol% DMG-PEG2000 with an N/P 6 exhibit the following physicochemical attributes.

Physicochemical attributes	
Size	85-120 nm
Polydispersity	< 0.2
Zeta potential	~ -6.1
Encapsulation efficiency	> 90%

1 dependent on payload size and fluid flow processing parameters

Figure 4



Did you know that Avanti Research™ offers formulations services?

Not sure how to formulate with CP-LC-1067?

Want to perform feasibility studies without equipment investment?

Avanti Research formulations experts are ready to help you turn your product ideas into reality. We provide support and guidance from initial concept through to full-scale production!

Non-warranty

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