

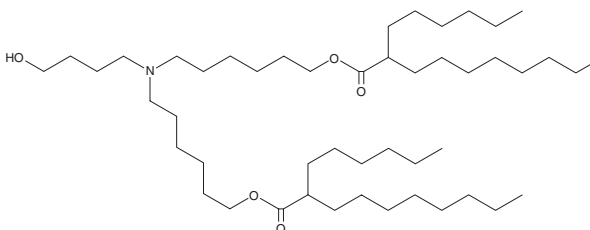
# PRODUCT INFORMATION



## ALC-0315

Item No. 34337

**CAS Registry No.:** 2036272-55-4  
**Formal Name:** 2-hexyl-decanoic acid, 1,1'-[[[4-hydroxybutyl]imino]di-6,1-hexanediy] ester  
**MF:** C<sub>48</sub>H<sub>95</sub>NO<sub>5</sub>  
**FW:** 766.3  
**Purity:** ≥96%  
**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.

### Laboratory Procedures

ALC-0315 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. Solvents such as chloroform purged with an inert gas can be used. The solubility of ALC-0315 in chloroform is approximately 50 mg/ml.

### Description

ALC-0315 is an ionizable cationic amino lipid that has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs).<sup>1</sup> Administration of severe acute respiratory coronavirus 2 (SARS-CoV-2) mRNA in ALC-0315-containing LNPs induces the production of IgG that binds to the SARS-CoV-2 receptor-binding domain (RBD) in rhesus macaques, with a boost in antigen-specific IgG geometric mean titers (GMT) seven and 14 days after a second dose. Formulations containing ALC-0315 have been used in the development of LNPs for the delivery of mRNA-based vaccines.

### Reference

1. Vogel, A.B., Kanevsky, I., Che, Y., *et al.* BNT162b vaccines protect rhesus macaques from SARS-CoV-2. *Nature* **592(7853)**, 283-289 (2021).

#### 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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