

# PRODUCT INFORMATION



## Q<sub>1</sub>-ALC-0315 (iodide)

Item No. 41240

**Formal Name:** 6-((2-hexyldecanoyl)oxy)-N-(6-((2-hexyldecanoyl)oxy)hexyl)-N-(4-hydroxybutyl)-N-methylhexan-1-aminium, monoiodide

**MF:** C<sub>49</sub>H<sub>98</sub>NO<sub>5</sub> • I

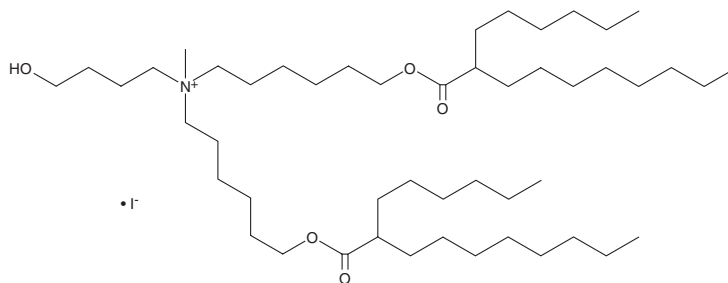
**FW:** 908.2

**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

Q<sub>1</sub>-ALC-0315 is a cationic quaternary ammonium lipid derivative of the ionizable cationic lipid ALC-0315 (Item No. 34337) that has been used in the generation of lipid nanoparticles (LNPs) for use *in vivo*.<sup>1</sup> LNPs containing Q<sub>1</sub>-ALC-0315 and ALC-0315 as a cationic lipid pair (CLP) and encapsulating mRNA encoding a luciferase reporter induce luciferase expression in the lungs and spleen in mice.

### Reference

1. Zeng, G., He, Z., Yang, H., *et al.* Cationic lipid pairs enhance liver-to-lung tropism of lipid nanoparticles for *in vivo* mRNA delivery. *ACS Appl. Mater. Interfaces* **16**(20), 25698-25709 (2024).

#### 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.

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