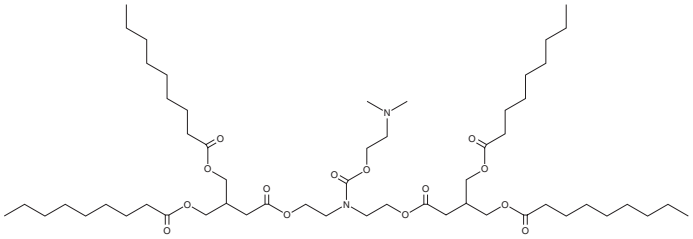
PRODUCT INFORMATION

Lipid A-11

Item No. 46327



CAS Registry No.:	2996998-09-3
Synonyms:	CICL1, L829, Lipid 829
MF:	$C_{55}H_{100}N_2O_{14}$
FW:	1,013.4
Purity:	≥98%
Supplied as:	A 10 mg/ml solution in methyl acetate
Storage:	-20°C
Stability:	≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Lipid A-11 is an ionizable cationic lipid (pK_a = 6.66) that has been used in the formation of targeted lipid nanoparticles (tLNPs) for the delivery of mRNA *in vitro* and *in vivo*.[1,2] CD5 monoclonal antibody-conjugated tLNPs (CD5-tLNPs) containing lipid A-11 accumulate in mouse spleen to a greater extent than CD5-tLNPs containing the benchmark lipid ALC-0315 (Item No. 34337).[2] CD5-tLNPs containing lipid A-11 and encapsulating mRNA encoding an anti-CD19 chimeric antigen receptor (CAR) induce CAR expression in primary human $CD8^+$ T cells *ex vivo* and in cynomolgus monkeys.

References

1. Karmali, P.P. and Tanis, S. Ionizable cationic lipids and lipid nanoparticles. *Capstan Therapeutics, Inc* **WO2023196444A1**, (2023).
2. Hunter, T.L., Bao, Y., Zhang, Y., *et al.* In vivo CAR T cell generation to treat cancer and autoimmune disease. *Science* **388(6753)**, 1311-1317 (2025).

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
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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