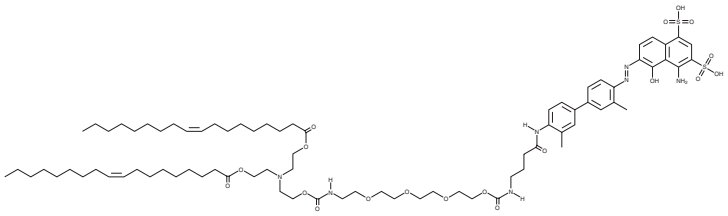
PRODUCT INFORMATION

EB-lipid

Item No. 9005065

Formal Name: 4-amino-6-((E)-(3,3'-dimethyl-4'-((Z)-24-(2-(oleoyloxy)ethyl)-6,20,28-trioxo-7,10,13,16,21,27-hexaoxa-5,19,24-triazapentatetracont-36-enamido)-[1,1'-biphenyl]-4-yl)diazenyl)-5-hydroxynaphthalene-1,3-disulfonic acid



Synonym: Evans Blue-modified Lipid

MF: $C_{80}H_{123}N_7O_{19}S_2$

FW: 1,551.0

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

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

Laboratory Procedures

EB-lipid is supplied as a solid. A stock solution may be made by dissolving the EB-lipid in the solvent of choice, which should be purged with an inert gas. EB-lipid is soluble (≥10 mg/ml) in methanol.

Description

EB-lipid is an albumin binder-lipid conjugate that has been used in place of PEGylated lipids in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vivo*.[1] It contains an ionizable cationic lipid, a tetraethylene glycol linker, and a derivative of Evans blue, which is a ligand of albumin. LNPs containing EB-lipid selectively accumulate in muscle and inguinal lymph nodes over the heart, liver, spleen, lungs, and kidneys in mice when administered intramuscularly. Vaccination with LNPs containing EB-lipid and encapsulating ovalbumin mRNA decreases tumor volume and increases survival and intratumoral cytotoxic T lymphocyte infiltration in a B16-OVA murine melanoma model. Vaccination with EB-lipid-containing LNPs encapsulating mRNA encoding viral antigens increases survival and antibody titers and decreases viral titers in mouse models of influenza A H1N1 or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.

Reference

1. Feng, Y., Tai, W., Huang, P., *et al.* Albumin-recruiting lipid nanoparticle potentiates the safety and efficacy of mRNA vaccines by avoiding liver accumulation. *Nat. Mater.* **24(11),** 1826-1839 (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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