

PRODUCT INFORMATION



Lipid OA2 (hydrochloride)

Item No. 37987

Formal Name: di((Z)-octadec-9-en-1-yl) L-lysyl-L-glutamate, dihydrochloride

Synonym: KE-oleyl

MF: $C_{47}H_{89}N_3O_5 \cdot 2HCl$

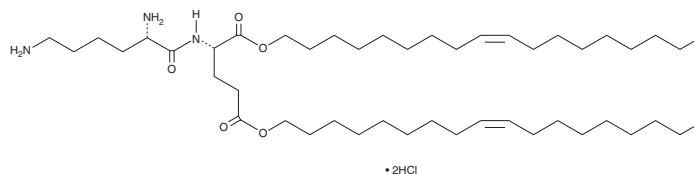
FW: 849.1

Purity: $\geq 95\%$

Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

Lipid OA2 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the lipid OA2 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Lipid OA2 (hydrochloride) is soluble in methanol.

Description

Lipid OA2 is an ionizable cationic lipid that has been used in the generation of single-component lipid nanoparticles (LNPs) for the delivery of siRNA.¹ LNPs containing lipid OA2 and siRNA targeting the gene encoding suppressor of cytokine signaling 1 (*Socs1*) decrease *Socs1* expression by approximately 50% in isolated mouse bone marrow dendritic cells (BMDCs). Vaccination with ovalbumin-induced isolated mouse BMDCs transfected with LNPs composed of lipid OA2 and *Socs1*-targeting siRNA increases survival and decreases tumor volume in a B16-OVA murine melanoma model.

Reference

1. Yu, Z., Wu, M., Huang, Y., *et al.* Single-component lipid nanoparticles for engineering SOCS1 gene-silenced dendritic cells to boost tumor immunotherapy. *Biomater. Sci.* **11**(1), 263-277 (2023).

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.

Copyright Cayman Chemical Company, 12/14/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM