

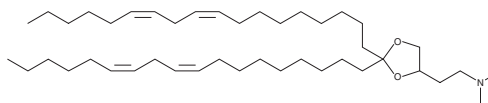
PRODUCT INFORMATION



DLin-KC2-DMA

Item No. 34363

CAS Registry No.: 1190197-97-7
Formal Name: N,N-dimethyl-2,2-di-(9Z,12Z)-9,12-octadecadien-1-yl-1,3-dioxolane-4-ethanamine
Synonym: KC2
MF: C₄₃H₇₉NO₂
FW: 642.1
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

DLin-KC2-DMA 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. DLin-KC2-DMA is soluble in DMSO.

Description

DLin-KC2-DMA is an ionizable cationic amino lipid (apparent $pK_a = 6.7$) that has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs).¹ Administration of Factor VII siRNA in DLin-KC2-DMA-containing LNPs reduces serum Factor VII protein levels in mice. LNPs containing DLin-KC2-DMA and androgen receptor siRNA decrease serum prostate-specific antigen (PSA) and tumor androgen receptor protein levels in an LNCaP mouse xenograft model.²

References

1. Semple, S.C., Akinc, A., Chen, J., *et al.* Rational design of cationic lipids for siRNA delivery. *Nat. Biotechnol.* **28**(2), 172-176 (2010).
2. Lee, J.B., Zhang, K., Tam, Y.Y.C., *et al.* Lipid nanoparticle siRNA systems for silencing the androgen receptor in human prostate cancer *in vivo*. *Int. J. Cancer* **131**(5), E781-E790 (2012).

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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