



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

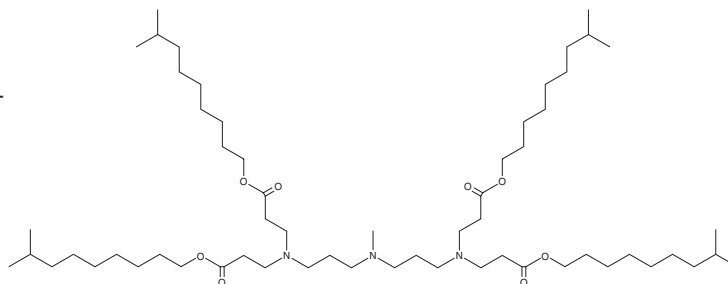
[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

PRODUCT INFORMATION



306O_{i10}
Item No. 36698

CAS Registry No.: 2322290-93-5
Formal Name: tetrakis(8-methylnonyl) 3,3',3'',3'''-(((methylazanediy))bis(propane-3,1-diyl))bis(azanetriyl))tetrapropionate
MF: C₅₉H₁₁₅N₃O₈
FW: 994.6
Purity: ≥95%
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

306O_{i10} 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. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 306O_{i10} in DMF is approximately 20 mg/ml and approximately 33 mg/ml in ethanol and DMSO.

Description

306O_{i10} is a branched-chain ionizable cationic lipidoid.¹ It has been used in the generation of lipid nanoparticles (LNPs). It has strong surface ionization at pH 5, which is the pH in the late endosomal compartment, and a surface pK_a value of 6.4 when encapsulating mRNA. LNPs containing 306O_{i10} and encapsulating an mRNA reporter accumulate primarily in the mouse liver and those encapsulating erythropoietin increase serum erythropoietin levels in mice. LNPs containing 306O_{i10} and encapsulating mRNA encoding the Cas9 nuclease (mCas9) and single-guide RNA targeting LoxP (sgLoxP) have been used to induce CRISPR-mediated gene editing in Ai9 mice that express a floxed STOP codon to prevent tdTomato expression.²

References

- Hajj, K.A., Ball, R.L., Deluty, S.B., *et al.* Branched-tail lipid nanoparticles potently deliver mRNA *in vivo* due to enhanced ionization at endosomal pH. *Small* **15(6)**, e1805097 (2019).
- Hajj, K.A., Melamed, J.R., Chaudhary, N., *et al.* A potent branched-tail lipid nanoparticle enables multiplexed mRNA delivery and gene editing *in vivo*. *Nano Lett.* **20(7)**, 5167-5175 (2020).

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, 12/07/2022

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