



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

# PRODUCT INFORMATION



## TCL053

Item No. 37045

**CAS Registry No.:** 2361162-70-9  
**Formal Name:** 2-(((4-(dimethylamino)butanoyl)oxy)methyl)-2-(((Z)-tetradec-9-enoyl)oxy)methyl)propane-1,3-diyl (9Z,9'Z)-bis(tetradec-9-enoate)

**MF:** C<sub>53</sub>H<sub>95</sub>NO<sub>8</sub>

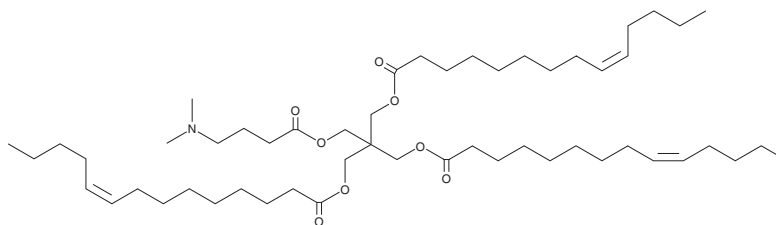
**FW:** 874.3

**Purity:** ≥98%

**Supplied as:** A solution in ethanol

**Storage:** -20°C

**Stability:** ≥1 year



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

### Description

TCL053 is an ionizable cationic amino lipid.<sup>1</sup> It has been used in the generation of lipid nanoparticles (LNPs) and has a pK<sub>a</sub> value of 6.8. LNPs containing TCL053 and encapsulating mRNA encoding the Cas9 nuclease, in combination with LNPs containing TCL053 and encapsulating single-guide RNA (sgRNA) targeting the Rosa26 locus, have been used to induce CRISPR-mediated gene editing in the mouse gastrocnemius muscle.

### Reference

1. Kenjo, E., Hozumi, H., Makita, Y., *et al.* Low immunogenicity of LNP allows repeated administrations of CRISPR-Cas9 mRNA into skeletal muscle in mice. *Nat. Commun.* **12(1)**, 7101 (2021).

#### 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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#### 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