

# PRODUCT INFORMATION



**306-N16B**

Item No. 37927

**CAS Registry No.:** 2803699-70-7  
**Formal Name:** 3,3',3'',3'''-(((methylazanediy))  
bis(propane-3,1-diyl))  
bis(azanetriyl))tetrakis(N-(2-  
(dodecylsulfaneyl)ethyl)  
propanamide)

**MF:** C<sub>75</sub>H<sub>151</sub>N<sub>7</sub>O<sub>4</sub>S<sub>8</sub>  
**FW:** 1,471.6

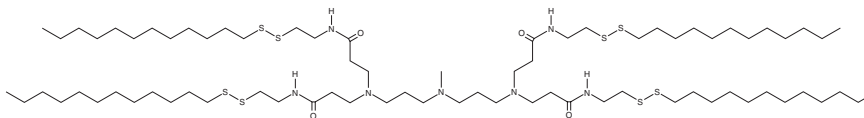
**Purity:** ≥98%

**Supplied as:** A solution in ethanol

**Storage:** -20°C

**Stability:** ≥3 years

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



## Laboratory Procedures

306-N16B 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 methanol purged with an inert gas can be used.

## Description

306-N16B is an ionizable cationic lipid.<sup>1</sup> It has been used in the generation of lipid nanoparticles (LNPs). Intravenous administration of LNPs containing 306-N16B and encapsulating an mRNA reporter accumulate specifically in the mouse lung primarily in lung endothelial cells. LNPs containing both 306-N16B and 306-O12B (Item No. 37549) and encapsulating mRNA encoding tuberous sclerosis complex 2 (Tsc2), a tumor suppressor, reduce tumor growth in a mouse model of pulmonary lymphangioleiomyomatosis (LAM) induced by intravenous injection of Tsc2-null kidney-derived epithelial tumor cells (TTJ cells).

## Reference

1. Qiu, M., Tang, Y., Chen, J., *et al.* Lung-selective mRNA delivery of synthetic lipid nanoparticles for the treatment of pulmonary lymphangioleiomyomatosis. *Proc. Natl. Acad. Sci. USA* **119(8)**, e2116271119 (2022).

### 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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