

# PRODUCT INFORMATION



## AMG 1541

Item No. 44932

**CAS Registry No.:** 3092408-38-0  
**Formal Name:** (1,4,7,10,13,16-hexaazacyclooctadecane-1,4,7,10,13,16-hexayl)hexakis(2-hydroxypropane-3,1-diyl)hexakis(5Z,5'Z,5''Z,5'''Z,5''''Z,5'''''Z)-hexakis(dodec-5-enoate)

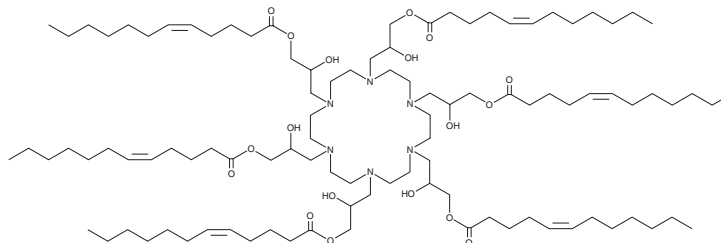
**MF:** C<sub>102</sub>H<sub>186</sub>N<sub>6</sub>O<sub>18</sub>  
**FW:** 1,784.6

**Purity:** ≥90%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years



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

### Laboratory Procedures

AMG 1541 is supplied as a solid. A stock solution may be made by dissolving the AMG 1541 in the solvent of choice, which should be purged with an inert gas. AMG 1541 is soluble (≥10 mg/ml) in ethanol.

### Description

AMG 1541 is an ionizable cationic lipid that has been used in the formation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vivo*.<sup>1</sup> LNPs containing AMG 1541 accumulate in the muscle or liver after intramuscular or intravenous administration, respectively, in mice. AMG 1541-containing LNPs encapsulating hemagglutinin A (HA) or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) spike protein mRNA increase serum levels of binding antibody titers in mice 35 days post-vaccination. LNPs containing AMG 1541 and encapsulating HA mRNA elicit similar serum levels of neutralizing antibodies in mice as LNPs containing SM-102 (Item No. 33474) but with 100-fold less HA mRNA.

### Reference

1. Rudra, A., Gupta, A., Reed, K., *et al.* Degradable cyclic amino alcohol ionizable lipids as vectors for potent influenza mRNA vaccines. *Nat. Nanotechnol.* **20**(12), 1831-1842 (2025).

#### 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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