

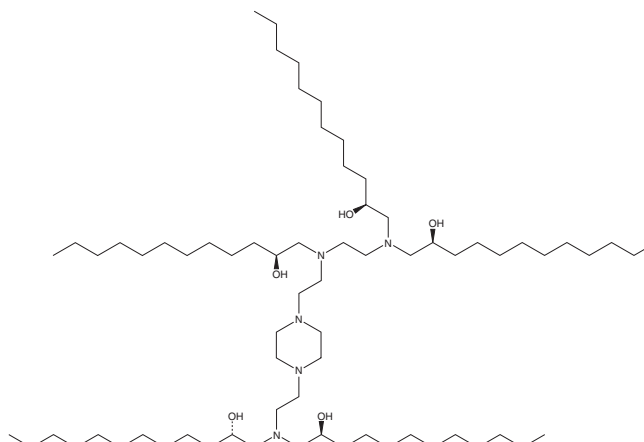
# PRODUCT INFORMATION



**(S)-C12-200**  
Item No. 38885

**CAS Registry No.:** 1226552-44-8  
**Formal Name:** 1,1'-[[2-[4-[2-[[2-[bis[(2S)-2-hydroxydodecyl]amino]ethyl]][(2S)-2-hydroxydodecyl]amino]ethyl]-1-piperazinyl]ethyl]imino]bis-2-dodecanol

**Synonym:** C12-200-S  
**MF:** C<sub>70</sub>H<sub>145</sub>N<sub>5</sub>O<sub>5</sub>  
**FW:** 1,137.0  
**Purity:** ≥98%  
**Supplied as:** A 50 mg/ml 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

(S)-C12-200 is an ionizable cationic lipid ( $pK_a = 7.12$ ) and an isomer of C12-200 (Item No. 36699).<sup>1</sup> It has been used in the formation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vivo*. Intravenous administration of LNPs containing (S)-C12-200 and encapsulating mRNA encoding Cre recombinase increase the percentage of tdTomato<sup>+</sup> hepatocytes, endothelial cells, and Kupffer cells in the livers of Ai14 mice greater than (R)-C12-200-containing and Cre mRNA-encapsulating LNPs.

## Reference

1. Da Silva Sanchez, A.J., Zhao, K., Huayameres, S.G., *et al.* Substituting racemic ionizable lipids with stereopure ionizable lipids can increase mRNA delivery. *J. Control Release* **353**, 270-277 (2023).

### 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

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