

SUPPLEMENTAL INFORMATION:

Synthesis and characterization of ceramide-containing liposomes as membrane models for different T cell subpopulations

Sascha Eder ¹, Claudia Hollmann ^{2°}, Putri Mandasari ^{2°}, Pia Wittmann ^{1,2}, Fabian Schumacher ³, Burkhard Kleuser ³, Julian Fink ⁴, Jürgen Seibel ⁴, Jürgen Schneider-Schaulies ², Christian Stigloher ⁵, Niklas Beyersdorf ²⁺ and Sofia Dembski ^{1,6+*}

¹ Fraunhofer Institute for Silicate Research, ISC, Würzburg, Germany; eder.sascha@freenet.de; pia.wittmann@stud-mail.uni-wuerzburg.de; sofia.dembski@isc.fraunhofer.de

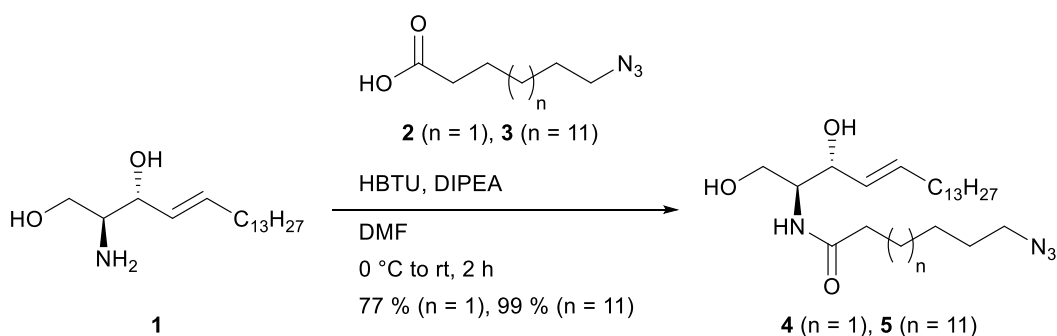
² University of Würzburg, Institute for Virology and Immunobiology, Würzburg, Germany; claudia.hollmann@gmx.net; putri.mandasari@uni-wuerzburg.de; pia.wittmann@stud-mail.uni-wuerzburg.de; jss@vim.uni-wuerzburg.de; niklas.beyersdorf@vim.uni-wuerzburg.de

³ Freie Universität Berlin, Institute of Pharmacy, Berlin, Germany; burkhard.kleuser@fu-berlin.de; fabian.schumacher@fu-berlin.de

⁴ University of Würzburg, Institute of Organic Chemistry, Würzburg, Germany; julian.fink@uni-wuerzburg.de; seibel@chemie.uni-wuerzburg.de;

⁵ University of Würzburg, Imaging Core Facility of the Biocenter, Würzburg, Germany; christian.stigloher@uni-wuerzburg.de

⁶ Department Tissue Engineering and Regenerative Medicine, University Hospital, Würzburg, Germany; sofia.dembski@isc.fraunhofer.de



Scheme S1. Synthesis of the azido-modified ceramide probes ω -N₃-C₆-Cer (**4**) and ω -N₃-C₁₆-Cer (**5**).

NMR Spectra

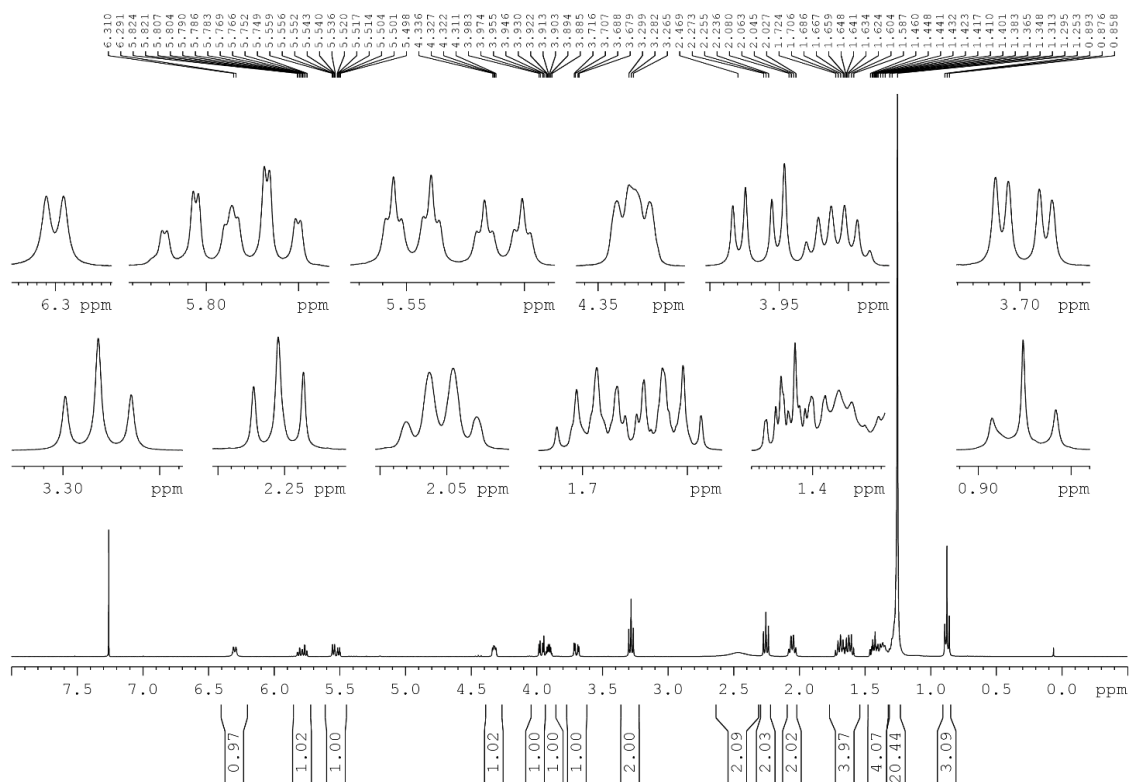


Figure S1. ¹H-NMR spectrum (CDCl₃, 400 MHz) of ω -N₃-C₆-Cer (**4**).

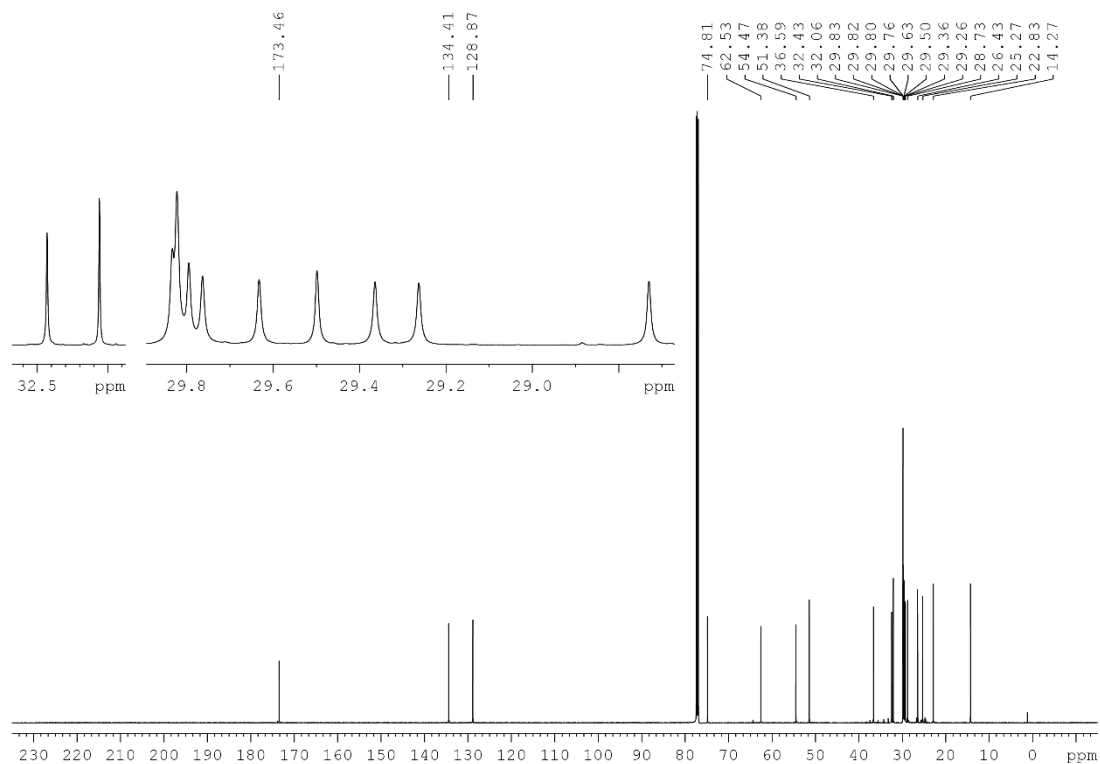


Figure S2. ¹³C-NMR spectrum (CDCl₃, 150 MHz) of ω -N₃-C₆-Cer (**4**).

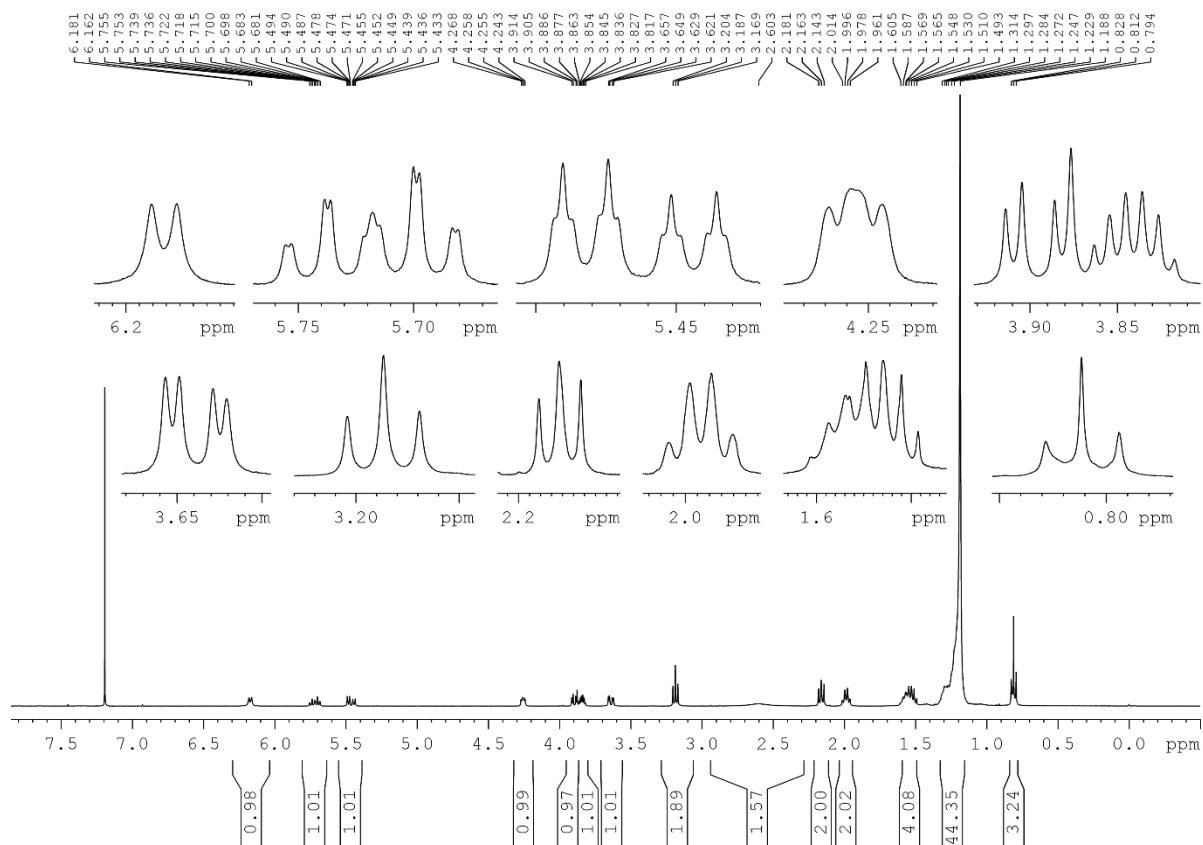


Figure S3. ^1H -NMR spectrum (CDCl_3 , 400 MHz) of $\omega\text{-N}_3\text{-C}_{16}\text{-Cer}$ (**5**).

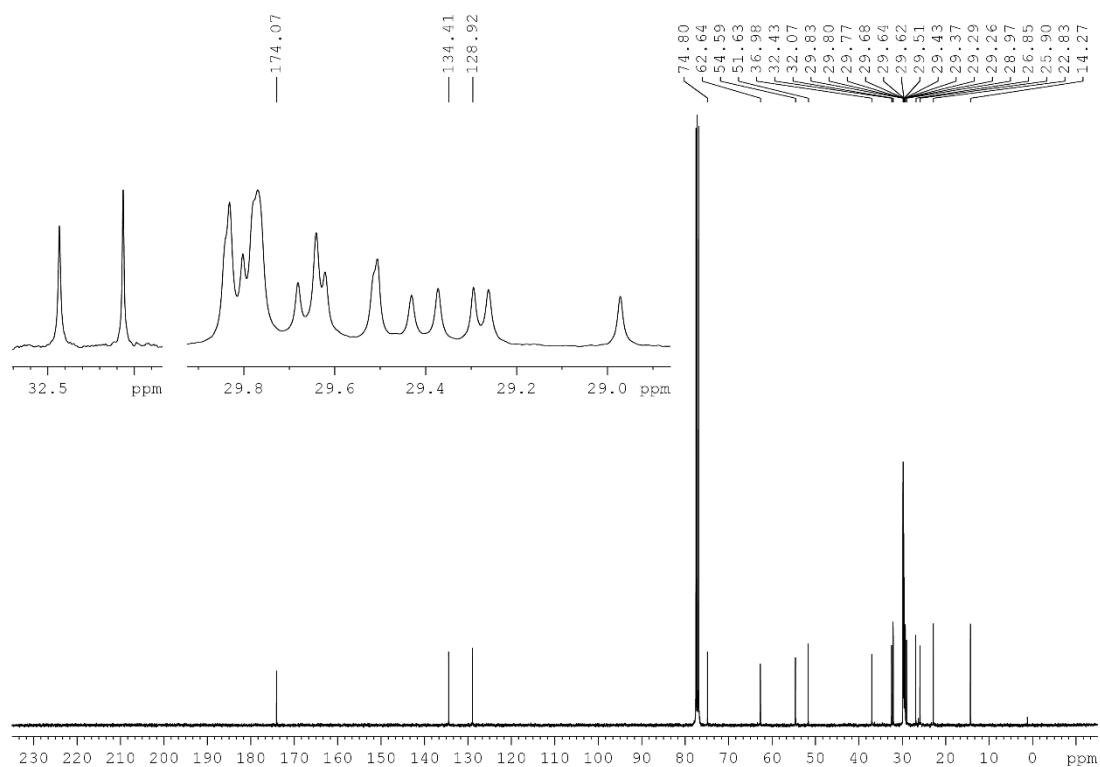


Figure S4. ^{13}C -NMR spectrum (CDCl_3 , 100 MHz) of $\omega\text{-N}_3\text{-C}_{16}\text{-Cer}$ (**5**).

Mass Spectra

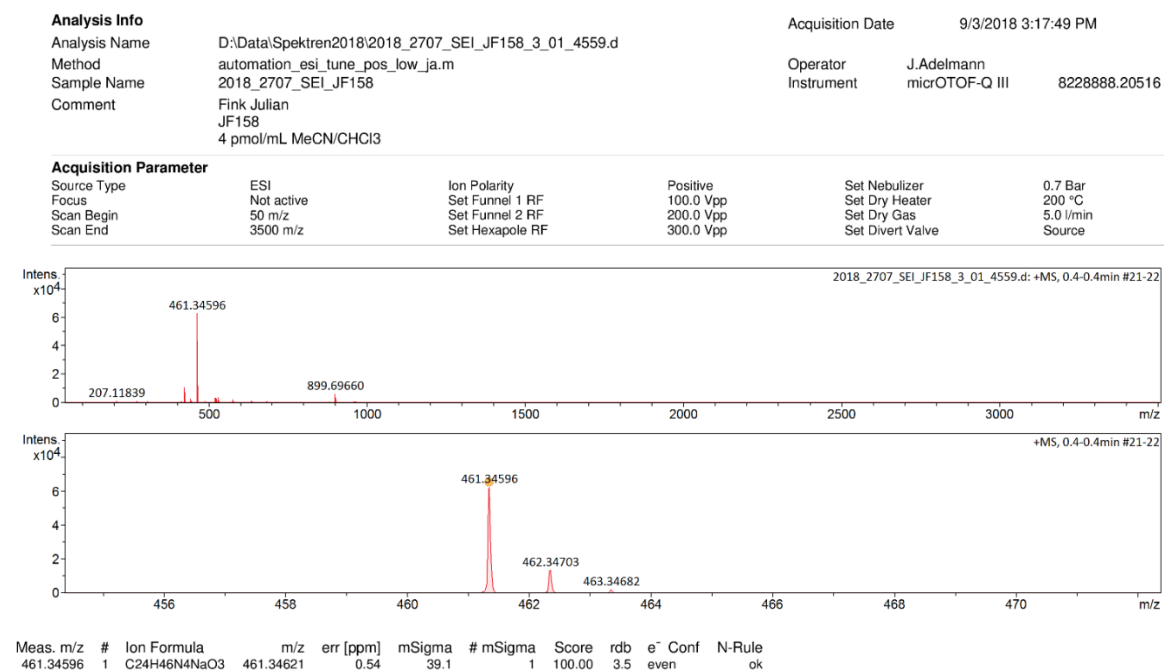


Figure S5. Mass spectrum (ESI⁺) of ω -N₃-C₆-Cer (4).

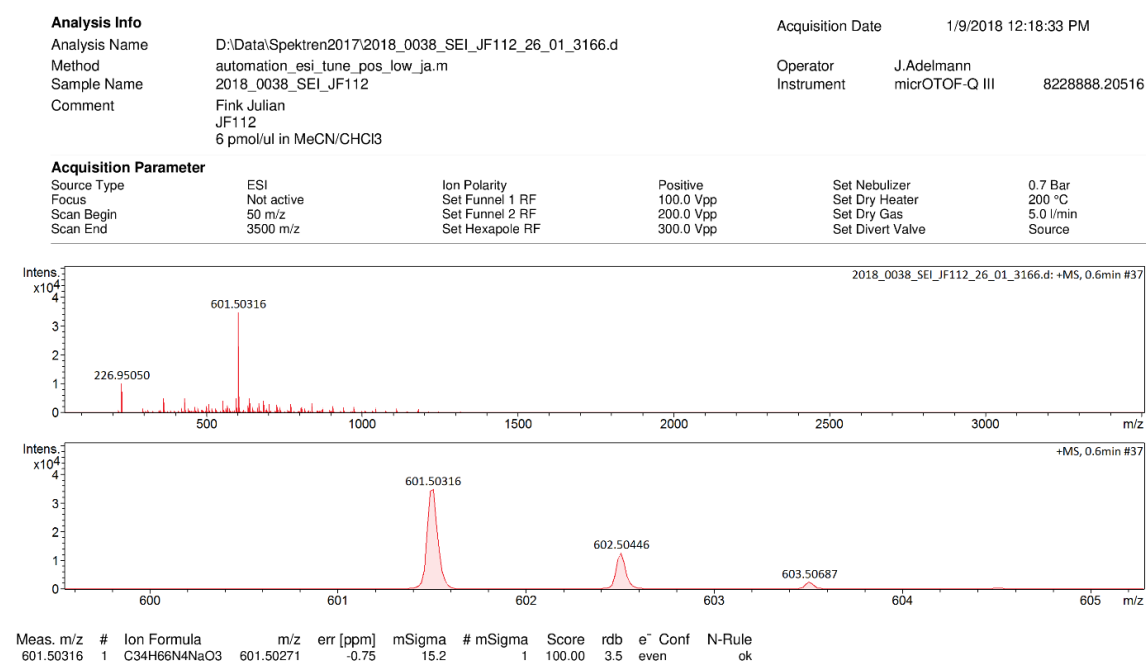


Figure S6. Mass spectrum (ESI⁺) of ω -N₃-C₁₆-Cer (5).