CERTIFICATE of ANALYSIS

(R)-Macrophage-activating Lipopeptide 2 (trifluoroacetate salt)

S-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-L-asparaginyl-L-asparaginyl-L-α-aspartyl-L-α-glutamyl-L-seryl-L-asparaginyl-L-isoleucyl-L-seryl-L-phenylalanyl-L-lysyl-L-α-glutamyl-L-lysine, trifluoroacetate salt

*Item No. 45758 * Batch No. 0820945*

Purity Specification: ≥95%

Molecular formula: C99H167N19O30S • XCF3COOH

CAS number: **Formula weight:** **2135.59** **Expiration date:** **17NOV2028**

Overview

Tests	Results
HPLC	Purity: 99.3 %
Mass Spec	[M-2H]2-: 1066.0
NMR	Conforms
19F-NMR	Conforms

Reviewed and approved by: Libby Perry

Libby Perry

WARNING
THIS PRODUCT IS FOR RESEARCH USE - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE. IT IS THE RESPONSIBILITY OF THE PURCHASER TO DETERMINE SUITABILITY FOR OTHER APPLICATIONS.

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
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/12/2018

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