

Certificate of Analysis

DSPE-PEG(1000) Carboxylic Acid

1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[carboxy(polyethylene glycol)-1000] (sodium salt)

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Molecular Weight 1811.3

Chemical Formula C₈₇H₁₆₉NNaO₃₃P

Physical State Powder Storage -20°C

Expiration Date One year from date of receipt

M Lot Number 7043PJC010

Avanti Lot Number 880239P-25MG-C-010

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	Powder : White solid which contains no foreign matter	Pass
TLC (80:20:2 Chloroform:Methanol:Ammonium Hydroxide)	>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: negative Water dip: one major spot	All Pass>99% Purity Ninhydrin: negative lodine: one major spot Phosphorus: positive Charring: negative Water dip: one major spot
Proton NMR	NMR spectrum consistent with structure	Consistent with structure
Phosphorus NMR	NMR spectrum consistent with structure	Consistent with structure
Carbon NMR	NMR spectrum consistent with structure	Consistent with structure
Molecular Weight (Mw) by TOF-MS	Run and Report	1783.9
Polydispersity Index (PDI) by TOF-MS	Run and Report	1.002

Melissa Bolin

Approved By:

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