

Certificate of Analysis

DSPE-PEG(2000) Biotin

1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[biotinyl(polyethylene glycol)-2000] (ammonium salt)

880129P-50mg Page 1 of 1

Molecular Weight 3016.781 (average MW due to polydispersity of PEG)

Chemical Formula C₁₄₂H₂₈₀N₅O₅₆PS (representative due to polidispersity of PEG)

Physical State Powder Storage -20°C

Expiration Date One year from date of receipt

M Lot Number 6291PKA036

Lot Number 880129P-50MG-A-036

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	Powder: White solid which contains no foreign matter	Pass
TLC (8:2 Chloroform: Methanol)	>99% Purity Ninhydrin: negative lodine: one major spot Phosphorus: positive Charring: faint positive Water dip: one major spot	>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: faint positive Water dip: one major spot
Proton NMR	NMR spectrum consistent with structure	Consistent with structure
Average Molecular Weight (Mw) by TOF-MS	Run and report	3108.426
Polydispersity Index (PDI) by TOF-MS	Run and report	1.002

Approved by:

For Research Use Only. Not For Human Use.