

Certificate of Analysis

DOPE-PEG(2000) Carboxylic acid

1,2-dioleoyl-sn-glycero-3-phosphoethanolamine-N-[carboxy(polyethylene glycol)-2000] (sodium salt)

880235C-10MG Page 1 of 1

Molecular Weight 2776.38 (average MW due to polydispersity of PEG)

Chemical Formula C₁₃₁H₂₅₃NNaO₅₅P Physical State Chloroform Storage -20°C

Expiration Date One year from date of receipt

M Lot Number 6694CID010

Avanti Lot Number 880235C-10MG-D-010

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	Chloroform : Clear, colorless solution which contains no foreign matter	Pass
TLC (80:20:2 Chloroform : Methanol : Ammonium Hydroxide)	>99% Purity Ninhydrin spray: negative lodine: one major spot Phosphorus: positive Charring: positive Water dip: one major spot	All Pass
HPLC-ELSD	NLT 99% (AUC)	99% (AUC)
FAME (GC/FID)	NLT 99% (AUC)	99.6% 18:1 (AUC)
Proton NMR	NMR spectrum consistent with structure	Consistent with structure
Average Molecular Weight (MW) by TOF-MS	Run & Report	2854.085
Polydispersity Index by TOF-MS	Run & Report	1.005

Approved By:

For Research Use Only. Not For Human Use.