

Certificate of Analysis

18:1 PI(4)P

1,2-dioleoyl-sn-glycero-3-phospho-(1'-myo-inositol-4'-phosphate) (ammonium salt)

850151P-500ug Page 1 of 1

Molecular Weight 977.147

Chemical Formula $C_{45}H_{90}N_2O_{16}P_2$

Physical State Powder Storage -20°C

Expiration Date One year from date of receipt

M Lot Number 5602PFC015

Avanti Lot Number 850151P-500UG-C-015

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	Powder : White solid which contains no foreign matter	Pass
TLC (45:35:7.7:2.3 Chloroform: Methanol: Water: Ammonium Hydroxide)	>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: positive Water dip: one major spot	All pass
Proton NMR	NMR spectrum consistent with structure	Consistent with structure
Phosphorus NMR	NMR spectrum consistent with structure	Consistent with structure
Phosphorus Assay	95-105% recovery phosphorus	Pass
Mass Spectroscopy	$[M-2NH_4+H]^- = 942.147 \pm 1$ amu $[M-2NH_4]^{2-} = 470.574 \pm 1$ amu	$[M-2NH_4+H]^- = 942.3 \text{ amu}$ $[M-2NH_4]^{2-} = 470.9 \text{ amu}$

Approved by: