

Certificate of Analysis

18:1 PI(3,4,5)P3

1,2-dioleoyl-sn-glycero-3-phospho-(1'-myo-inositol-3',4',5'-trisphosphate) (ammonium salt)

850156P-500ug Page 1 of 1

Physical State Powder Storage -20°C

Expiration Date One year from date of receipt

M Lot Number 5607PFG014

Avanti Lot Number 850156P-500UG-G-014

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
Mass Spectroscopy	$[M-4NH_4+2H]^{2-} = 550.584 \pm 1 \text{ amu}$ $[M-4NH_4+3H]^{-} = 1102.168 \pm 1 \text{ amu}$	$[M-4NH_4+2H]^{2-} = 550.6$ amu $[M-4NH_4+3H]^{-} = 1101.5$ amu
Phosphorus Assay	95-105% recovery phosphorus	98.3% recovery

Approved by: Ondion Thomas