

Certificate of Analysis

MPLA (PHAD®)

Monophosphoryl Lipid A (Synthetic) (PHAD®)

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Physical State Powder Storage -20°C

Expiration Date One year from date of receipt

M Lot Number 5086PHD029

Avanti Lot Number 699800P-5MG-D-029

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	Powder : White solid which contains no foreign matter	Pass
TLC (75:25:3 Chloroform: Methanol: Water)	>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: positive Water dip: one major spot	All Pass
HPLC-ELSD	NLT 99% (AUC)	100% (AUC)
Proton NMR	NMR spectrum consistent with reference structure	Consistent with structure
Phosphorus NMR	NMR spectrum consistent with reference structure	Consistent with structure
Mass Spectroscopy	[M-NH ₄] = 1745.469 ± 1 amu	[M-NH ₄] ⁻ = 1745.7 amu

Approved By:

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