

## Certificate of Analysis

## Kdo2-Lipid A (KLA)

Di[3-deoxy-D-manno-octulosonyl]-lipid A (ammonium salt)

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Molecular Weight2306.840Physical StatePowderStorage-20°C

**Expiration Date** One year from date of receipt

M Lot Number 5085PGD021

Avanti Lot Number 699500P-1MG-D-021

ANALYSIS	SPECIFICATION	RESULTS
Physical examination	<b>Powder</b> : White solid which contains no foreign material	Pass
TLC (65:35:8 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 95% hexa-acyl Kdo <sub>2</sub> Lipid A (AUC)	100% (AUC)
Phosphorus NMR	NMR spectrum consistent with structure	Consistent with structure
Mass Spectroscopy	$[M-4NH_4+H]^{3-} = 745.28 \pm 1$ amu $[M-4NH_4+2H]^{2-} = 1118.2 \pm 1.5$ amu	[M-4NH <sub>4</sub> +H] <sup>3-</sup> = 745.7 amu [M-4NH <sub>4</sub> +2H] <sup>2-</sup> = 1118.9 amu

Approved by: Ondion Thomas