

## Certificate of Analysis

## glycocholic acid-d4

5ß-cholanic acid-3a,7a,12a-triol N-(carboxymethyl)-amide-d4

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

M Lot Number 6916PGB010

Avanti Lot Number 330277P-1MG-B-010

ANALYSIS	SPECIFICATION	RESULTS
Physical Examination	<b>Powder</b> : White solid which contains no foreign matter	Pass
TLC	>99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: negative Charring: positive Water dip: one major spot	All Pass
Proton NMR	NMR spectrum consistent with structure	Consistent with structure
Carbon NMR	NMR spectrum consistent with structure	Consistent with structure
Mass Spectroscopy	[M-H] <sup>-</sup> = 468.66 ± 1 amu	[M-H] <sup>-</sup> = 468.34 amu
Isotopic Purity by Mass Spec	Run and Report	99.7% purity No d5 detected

Approved By:

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