



CERTIFICATE OF ANALYSIS

The Power to Question

Catalog Number: sc-301835
Lot Number: SAMPLE
Product Name: Spermine-butane-d8 tetrahydrochloride
CAS Number: 1173022-85-9
Molecular Formula: $C_{10}D_8H_{18}N_4 \cdot 4HCl$
Molecular Weight: 356.23

Test	Specification	Result
Identification (1H -NMR)	Consistent with proposed structure	Complies
Identification (^{13}C -NMR)	Consistent with proposed structure	Complies
Identification (Mass Spectrometry)		Sample contains 83.5% 2H_8 , 14.6% 2H_7 , 1.1% 2H_6 . Unlabelled material was not detected. Total isotope incorporation is M+7.77 2H /molecule (97.1% 2H based on a theoretical of 8.00 2H /molecule).
Identification (Mass Spectrometry - ESI)		Expected M+1 signal at 211 amu, no unlabelled material detected.
Purity (HPLC)		98.1% (PAR)
Purity (TLC)		> 95%

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

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