



CERTIFICATE OF ANALYSIS

Product	Spermine tetrahydrochloride
Grade	Biotech
Product Code	SB0902
Formula	$C_{10}H_{26}N_4 \cdot 4HCl$
MW	348.19
CAS#	306-67-2
Lot No	

Test Items	Specifications	Results
Appearance	white to slightly off-white crystalline powder	
Water Content(K. Fischer)	≤ 1.0 %	
Argentometric Titration	98.5-101.5 %	
pH-Value (1 M in water at 25°C)	6.0 ± 1.0	
FT-IR Spectrum	corresponds to reference spectrum	
¹ H-NMR Spectrum	corresponds to reference spectrum	
¹³ C-NMR Spectrum	corresponds to reference spectrum	

Storage: Room Temperature.