

## Certificate of Analysis

Date of Testing: 2022-09-14 15:07:56  
Date of Next Testing: 2024-09-13 15:07:56  
Product Name: **Spermine**  
CAS Number: 71-44-3  
Specifications & Purity: for cell culture, ≥98.0%(GC)  
Lot #: I2207119  
SKU #: **S113079**  
**Analysis:** **118592**  
Storage Temperature: Store at 2-8°C

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	98.90%
Cell Culture Test	pass	Pass
Solubility in H <sub>2</sub> O , clear colorless ,50 mg/ml in water	pass	Pass
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance (S113079)	clear or white amorphous semisolid	clear or white amorphous semisolid



John Su  
QA & QC Manager