

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-01-25 17:18:41

Date of Next Testing: 2024-01-25 17:18:41

Product Name: **Spermine**

CAS Number: 71-44-3

Specifications & Purity: Moligand™, ≥98%

Lot #: A2221101

SKU #: **S109704**

Version: **0**

Analysis #: **070466**

Storage Temperature: Store at 2-8°C

| Parameter                                                            | Limit Values                        | Result                              |
|----------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Purity(GC)                                                           | 98-100 (%)                          | 98.07200 %                          |
| Water by Karl Fischer                                                | 0-3 (%)                             | 1.50000 %                           |
| Appearance (S109704)                                                 | White solid or amorphous semi-solid | White solid or amorphous semi-solid |
| Proton NMR spectrum                                                  | Conforms to Structure               | Conforms to Structure               |
| Solubility in H <sub>2</sub> O , clear colorless solution at 50mg/ml | pass                                | Pass                                |



John Su  
QA & QC Manager