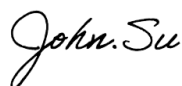


Shanghai Aladdin Biochemical Technology Co., LTD  
809 Chuhua Branch Road, Fengxian District, Shanghai 201400, China

## Certificate of Analysis

Date of Testing: 2022-12-08 17:12:51  
Date of Next Testing: 2025-12-07 17:12:51  
Product Name: **Sodium pyruvate-1-<sup>13</sup>C**  
CAS Number: 87976-71-4  
Specifications & Purity: ≥99 atom%, ≥98%  
Lot #: L2205040  
SKU #: **S345696**  
Version: **1**  
Analysis #: **141075**  
Storage Temperature: Store at 2-8°C, Argon charged

| Parameter                 | Limit Values          | Result                |
|---------------------------|-----------------------|-----------------------|
| Purity(HPLC)              | 98-100 (%)            | 98.20000 %            |
| Isotopic purity(13C)      | 99-100 (%)            | 99.60000 %            |
| Proton NMR spectrum       | Conforms to Structure | Conforms to Structure |
| ICP:Confirms Na component | Confirmed             | Confirmed             |



John Su  
QA & QC Manager