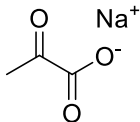


# Certificate of Analysis

| MedKoo Cat#: | Product Name:   | Lot#:    |
|--------------|-----------------|----------|
| 529813       | Sodium pyruvate | T7C12I04 |

| Chemical name  |  |
|--|--|
| sodium 2-oxopropanoate   |  |
| Synonyms   |  |
| FP-0019; FP-0020; RES-001; RES-100; RES-110; FP0019; FP0020; RES001; RES100; RES110; FP 0019; FP 0020; RES 001; RES 100; RES 110 |  |
| Chemical structure   | CAS# and Theoretical analysis  |
|   | MedKoo Cat#: 529813<br>Name: Sodium pyruvate<br>CAS#: 113-24-6 (Sodium)<br>Lot#: T7C12I04<br>Chemical Formula: C <sub>3</sub> H <sub>3</sub> NaO <sub>3</sub><br>Exact Mass: 109.998<br>Molecular Weight: 110.04 |

| Analysis item      | Specifications / Results   |
|--------------------|--|
| Appearance         | White to off-white solid powder  |
| Structure          | <sup>1</sup> H-NMR analysis matches the structure. MS analysis gives the correct molecule weight. Both NMR and MS data are consistent with those reported in the literature. |
| Purity (HPLC)      | >98.0%   |
| Solubility         | Soluble in DMSO  |
| Conclusion         | This product conforms with MedKoo's quality standards  |
| Shipping condition | Shipped under ambient temperature as non-hazardous chemical. This product is stable for a few weeks during ordinary shipping and time spent in customs.                      |
| Storage condition  | Short term storage (weeks): 0 – 4 °C under dry condition<br>Long term storage (months): -20 °C under dry condition   |
| Shelf life         | At least 5 years if properly stored.   |

**CAUTION: NOT FULLY TESTED. FOR RESEARCH ONLY, NOT FOR HUMAN USE**

Label: