

## Certificate of Analysis

Date of Testing: 2023-11-17 16:04:52

Date of Next Testing: 2027-11-16 16:04:52

Product Name: **D-Glutamine**

CAS Number: 5959-95-5

Specifications & Purity: 98%

Lot #: K2314055

SKU #: **D107632**

**Analysis: 164516**

| Parameter   | Limit Values          | Result                |
|---|-----------------------|-----------------------|
| Specific Rotation [α] <sub>20</sub> /D(c=5 in 5N HCl) | -35--30 (°)           | -30.92°               |
| Purity(HPLC)  | 98-100 (%)            | 99.78900%             |
| Purity(Nonaqueous Titration)                          | 97.5-102.5 (%)        | 99.30%                |
| Appearance (D107632)                                  | white powder          | White powder          |
| Proton NMR spectrum                                   | Conforms to Structure | Conforms to Structure |
| Solubility in 1 M HCl , Colorless Clear 50 mg/ml      | pass                  | Pass                  |



John Su  
QA & QC Manager